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RAIL PORTS:
THE COLLABORATION OF RAILROAD &
COASTAL STEAMBOAT COMPANIES
IN NEW ENGLAND IN THE 1840s

BY
LAURA K. HOGLUND

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS
IN
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UNIVERSITY OF RHODE ISLAND

2016

MASTER OF ARTS THESIS

OF

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2016

ABSTRACT

Prior to the development of railroad travel in New England, the primary mode of transportation was the stagecoach, a slow and uncomfortable vehicle. Steamboats traveled between coastal cities, but were more limited in their routes than stagecoaches and averaged the same amount of travel time. Desire for faster travel times, specifically between New York City and Boston, accelerated technological advancements that led to the development of a fledgling railroad network in New England by the second quarter of the nineteenth century. It also led to increased collaboration between railroad and steamboat companies, each offering combination routes to save time.

The Long Island Railroad Company (LIRRC) was one of many railroad companies that took part in this transportation revolution. It was also one of many to experience financial hardship and one of the few to escape complete failure following the economic Panic of 1837. LIRRC trains departed Brooklyn and arrived in Greenport, at the northeastern end of Long Island, three hours later. Passengers then took a ferry across Long Island Sound to either Stonington or Norwich, Connecticut and then continued to Boston by railroad. This route was poised to cut travel time between New York and Boston nearly in half, but lasted only two and a half years.

This study will examine the impact of financial hardship on the LIRRC's quest to offer the fastest route between New York and Boston.

ACKNOWLEDGEMENTS

I am extremely grateful to my major professor, Rod Mather, his guidance helped give this thesis direction and shape. And also to my committee members, Kristine Bovy and Michael Honhart, for their input from a perspective outside of maritime history.

I would like to acknowledge my parents, Andy and Chris Hoglund, who supported me in one educational endeavour after another in the Midwest and New England.

I would also like to acknowledge my grandmother, Mary Geraghty Hoglund, for encouraging my interest in history and imparting to me the grammatical wisdom of her years as a high school English teacher.

Finally, I would like to thank Robert Ballard and Ken Marshall for authoring and illustrating *Exploring the Titanic* which book I read in the third grade at my elementary school library and which first sparked in me an interest in maritime history and specifically my interest in steamships. The narrative of the *Titanic* is an unyieldingly fascinating one that has now held my interest for 20 years with many more to come.

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Introduction: The Past & Present of Transportation

Traveling between Boston and New York City in the early-nineteenth century was a daunting task. It required a days-long commitment to travel and several interruptions along the way. In 1830, the fastest form of transportation in the eastern United States was the stagecoach. Three types of stagecoaches operated during this time: mail-only and mail and passenger, were both referred to as 'mail coaches.' The third type was passenger only or 'accommodation' coaches. Most accommodation coaches left their departure point early in the morning, traveled for between 12 and 17 hours, stopped at a tavern overnight, and left early the next morning for another long day of travel arriving at their destination on the evening of the second day. On longer trips a third day or partial day of travel was required. Most mail coaches, however, followed a different schedule. They usually left late at night, traveled all night, made stops along the way, and arrived at their destination on the morning of the third day. Return trips usually followed the same route in reverse stopping at most, if not all, of the same places.¹ A typical stagecoach route between Boston and New York traveled through and stopped at several cities along the way including Worcester, Springfield, Providence, Hartford, New Haven, or New London (Figure 1). Each of these routes took over 24 hours to travel the entire distance of about 200 miles. One specific mail coach traveling between Boston and New York left Boston at 10pm, stopped in Worcester at 3:30am, Hartford at 1pm, New Haven at 8pm, and arrived in New York at 10am the

¹ Badger and Porter, comp., *Stage Register* (Boston: Badger and Porter, 6 Sep 1825), 1-14; Badger and Porter, comp., *Stage Register* (Boston: Badger and Porter, 7 Mar 1826), 1-16; Badger and Porter, comp., *Stage Register* (Boston: Badger and Porter, 2 Mar 1830), 1-27.

following morning; 36 hours later. A Boston accommodation coach followed a similar route leaving Boston at 5am, arriving in Ashford, Connecticut in time “to sup and lodge,” departed Ashford at 5am the next morning, arrived in Hartford at 11am, and New Haven at 7pm in time to travel to New York by steamboat from New Haven.² Even before the collaboration of railroad and coastal steamboat companies, similar arrangements existed with stagecoach companies. Looking at a stagecoach route listing for New England from the 1830s, it is clear that Boston and New York were the most important cities in the region. They were the hubs of travel for New England stagecoaches just as they continue to be hubs of travel today.³

Prior to the development of railroads in New England, travel time was determined by how many delays a vehicle encountered on any given trip and how fast it could travel. Stagecoaches had the most potential for delay since they were vulnerable to problems from road, vehicle, weather, and driver. Stage roads were constructed primarily of gravel or stone and wooden beams were placed over soft areas to ensure the coach didn’t sink in or get stuck, but none of these materials lasted longer than a few years without needing to be replaced.⁴ Road repairs as we think of them today were non-existent and coach drivers liked driving in the winter best because the snow filled in the ruts and potholes that plagued the stage roads, though the problem of getting stuck in the snow was ever-present. A turnpike system was instituted in 1797

² Badger and Porter, comp., *Stage Register* (Boston: Badger and Porter, 2 Mar 1830), 4.

³ Snow and Wilder, *Pathfinder Railway Guide*, (Boston: Pathfinder, 1847), unnumbered page before page 1.

⁴ Edward Chase Kirkland, *Men, Cities, and Transportation: A Study in New England History 1820-1900*, (Cambridge, MA: Harvard University Press, 1948), 36-37; Stephen Jenkins, *The Old Boston Post Road*, (New York: G. P. Putnam’s Sons, 1913), 36.

to combat poor road conditions after state governments refused to pay for maintenance. The proceeds from turnpikes helped cover needed repairs. The turnpike system continued through the late nineteenth century.⁵ Roads that were traveled often needed more repairs than those less traveled and correspondingly turnpikes in each state or county charged different amounts. Drivers usually chose less expensive routes even though the more expensive ones often presented better driving conditions.⁶ At the height of their popularity, in the 1830s, stagecoach passengers enjoyed well-maintained roads thanks to funds from the numerous turnpikes then in existence. After the popularization of railroad and steamboat travel, use of coaches declined and as a result of decreased travel numbers, less money came in from turnpike roads. Consequently, the condition of coaching roads worsened and eventually resembled those before implementation of the turnpikes.⁷

Most coaches were simple vehicles with two axles and four wheels in addition to the passenger compartment and driver's seat and most were better suited to city streets than rural roads.⁸ When a coach became stuck in mud or broke an axle, the only recourse was for the passengers to help make repairs, push the coach free, or send someone to the next or previous town for help; which could be tens of miles away. Any of these efforts could take a few hours or more and delay the trip further making arrival times unpredictable, especially if a breakdown occurred during the first leg of a journey with

⁵ Kirkland, 37.

⁶ Kirkland, 34-41.

⁷ Jenkins, 42.

⁸ Maxwell G. Lay, *Ways of the World: A History of the World's Roads and the Vehicles that Used Them*, (New Brunswick, NJ: Rutgers University Press, 1992), 126-127.

passengers needing to make a connection in other towns.⁹ Railroads, by comparison, had much more complex construction than coaches but were much less prone to mechanical delays. While coaches were limited in speed by poor road conditions and simplicity of construction, railroads faced no similar issue. Tracks were made primarily out of iron and required little maintenance or repair after installation. Consistently smooth track surfaces led to increases in speed. Even in the early years of railroads, trains could travel at 15 or 20 miles per hour, which was about three times as fast as a typical stagecoach travelling at six or seven miles per hour.¹⁰ The travel speeds of railroads and steamboats averaged about the same during the early to mid-nineteenth century and both greatly outperformed stagecoaches in this regard.

Driver-caused accidents or delays were common in eighteenth century America, but competition between stage companies in the early and middle nineteenth century forced individual companies to implement and enforce stricter laws regarding drunk driving and excessive speed. Because of these laws, the number of driver-caused accidents was greatly reduced by the mid-nineteenth century. It was not just for the sake of passenger safety that stage companies enforced these rules; its reputation greatly suffered if passengers riding in its coaches were injured because the driver was driving too fast.¹¹ Coastal steamboats faced similar restrictions in the early to mid-nineteenth century as competition increased among the companies and every second

⁹ Jenkins, 24-25; Allan Forbes, *Taverns and Stagecoaches of New England: Anecdotes and Tales Recalling the Days of Stagecoach Travel and the Ancient Hostelrys where Strangers Tarried*, ed., Ralph Mason Eastman (Boston: State Trust Company, 1953), 10-11.

¹⁰ Wolfgang Schivelbusch, *The Railway Journey: The Industrialization of Time and Space in the 19th Century*, (Berkeley, CA: University of California Press, 1986), 78; Lay, 138.

¹¹ Jenkins, 40-41; Kirkland, 54.

spent at the dock disembarking passengers was a second that could have been spent headed back out to sea.

Many travelers made their journey piecemeal, dividing between stagecoach and steamboat, in an attempt to arrive faster than using only one conveyance. During the 1830s, travelers preferred to use coastal steamboats rather than railroads or stagecoaches alone. This allowed them to cover distance more quickly and also travel to destinations where railroads and coaches could not go. The best example of this were steamboat routes out of Boston headed south to Rhode Island, Connecticut, Southeastern Massachusetts, or New York. The travel time around Cape Cod by boat took nearly as long as a stagecoach and therefore made it impractical. So many passengers took a train or a coach from Boston to a port city and then boarded a steamboat for the remainder of the voyage.¹² Stagecoach companies quickly picked up on this trend and accommodated the growing number of passengers who followed it. Advertisements for stage travel promised to deliver passengers to their destination “in time to take the steam boats for New York.”¹³ When railroads emerged, the companies provided faster transportation than even the combined stagecoach-steamboat routes. The speed of a railroad was about three times that of a stagecoach, which had the potential to cut travel time almost in half.

¹² Edwin Dunbaugh, *Night Boat to New England 1815-1900*, (Westport, CT: Greenwood Press, 1992), 35; William Leonhard Taylor, *A Productive Monopoly: The Effect of Railroad Control on New England Coastal Steamship Lines 1870-1916*, (Providence, RI: Brown University Press, 1970), 4 & 14.

¹³ Badger and Porter, 1830, 4.

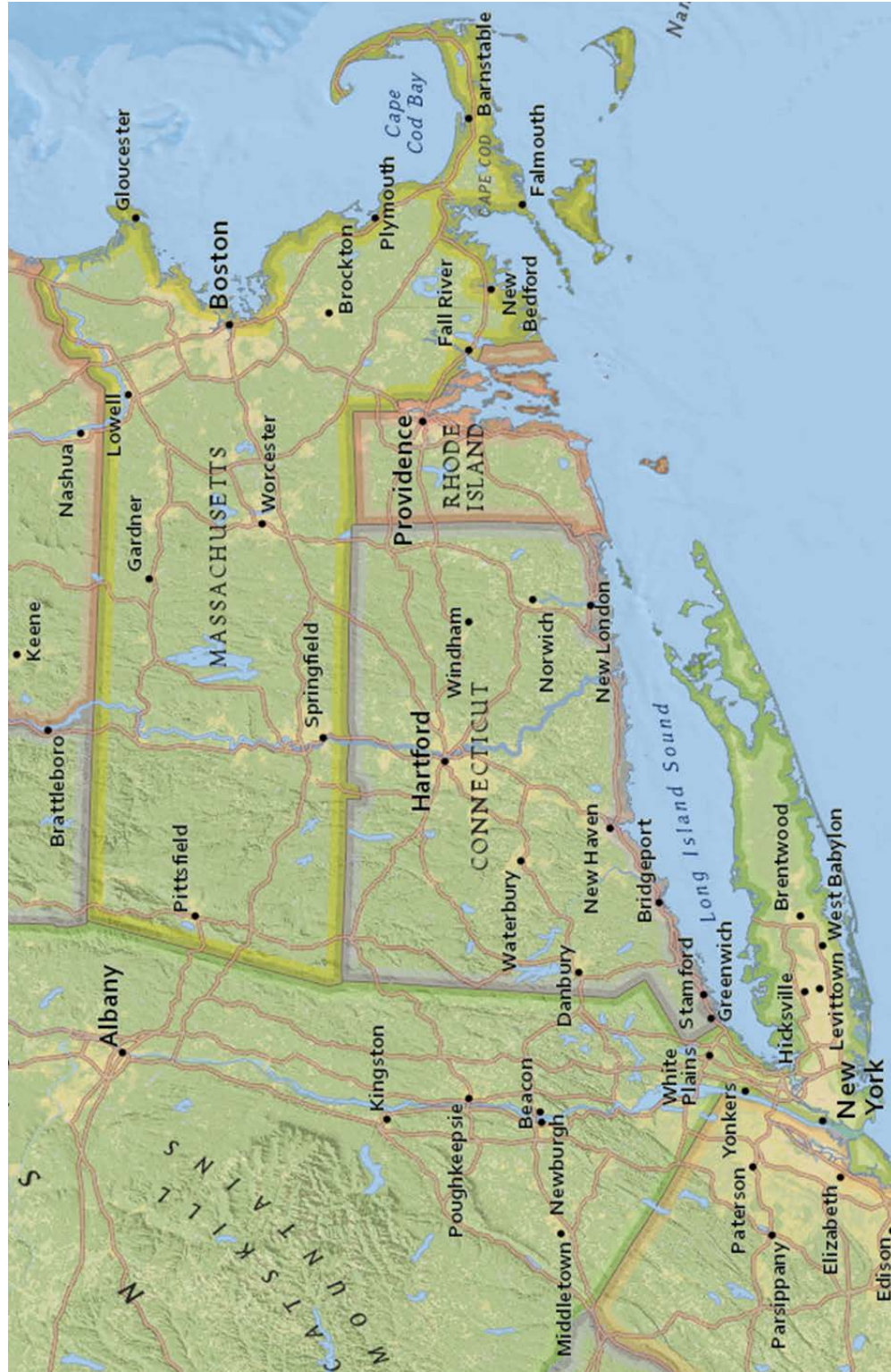


Figure 1: Map of Southern New England and Eastern New York (2016)

A New Company: The Future of Transportation

The story of the Long Island Railroad Company (LIRRC) is a complex one fraught with poor decisions and bad fortune. The company began with the ambitious idea of building the fastest transportation route between Boston and New York City, which it attained in 1844 and held for a few short years. The LIRRC encountered difficult financial straits that delayed construction and the eventual opening of the line by several years in the late 1830s. These years spent idle and unprofitable in the late 1830s contributed significantly to the railroad's subsequent downfall in the late 1840s.

The narrative of the LIRRC begins with an earlier, separate company, The Brooklyn and Jamaica Railroad (B&J), which was incorporated on April 25, 1832 with a stated purpose of connecting the towns of Brooklyn in Kings County and Jamaica in Queens County (Figures 2 & 3) with a short stretch of track. The acts of incorporation of the B&J specified that the company had three years from the date of incorporation to begin laying tracks and five years from the starting date to complete construction of the entire route.¹⁴ Brooklyn laws at the time stated that, "No street or lane in the village of Brooklyn shall be made use of by the said rail-road company for the said rail-road, nor shall steam power be used on any part of the rail-road within the said village..."¹⁵ It was the last segment of the law that necessitated the building of the Atlantic Avenue Tunnel, also known as the Cobble Hill Tunnel, underneath Atlantic

¹⁴ *Laws of the State of New York Passed at the Fifty-Fifth Session of the Legislature Begun and Held at the City of Albany, the Third Day of January 1832* (Albany, NY: E. Croswell, 1832), 452.

¹⁵ *Laws of the State of New York* (1832), 457.

Street during the railroad's construction.¹⁶ However, work on the tunnel did not begin until 1844, 10 years after the initial construction began. Meanwhile, train cars along this route were pulled by horses and then connected with a steam engine once outside the village limits of Brooklyn.¹⁷

Civil engineer David Bates Douglass (Figure 4) conducted a land survey for the B&J in the Fall of 1832 to determine where a suitable railroad route lay.¹⁸ The acts of incorporation gave some guidance about the trajectory of the route even before the survey, saying it should pass by "...the villages of Flushing or Flatbush, as the one or the other shall be rendered expedient...on the north or south side of the ridge of hills which lie between Brooklyn and Jamaica."¹⁹ Douglass reported on two possible routes, a northern one along the northern coast of Long Island and a southern one through the middle of the island.²⁰ Whichever route, northern or southern, Douglass' survey deemed more suitable for construction, the tracks would pass by either Flushing or Flatbush. The routes were the same distance, 11 miles, and each had its own natural obstacles to overcome, but ultimately the financial concerns triumphed over other considerations because the southern route would cost \$11,290.50 less than the northern one to construct.²¹ Interestingly, the LIRRC later faced a similar route decision after the land survey it commissioned. Contractors

¹⁶ Long Island Railroad Company Board of Directors Meeting Minutes [hereafter, LIRRC Minutes], January 2, 1844, Book 1, Box 305, PennCentral Collection, New York Public Library, New York, NY; New York State Historic Preservation Office, "National Register of Historic Places Nomination Form for Atlantic Avenue Tunnel," [hereafter, NRHP] 4.

¹⁷ NRHP, 4. In 1844, the street under which the tunnel was built was called Atlantic Street, and was later changed to Atlantic Avenue, its present name. See below, page 27, for more information on the Tunnel.

¹⁸ *American Railroad Journal* [hereafter, ARJ], October 27, 1832, 690-691; *Long Island Farmer & Queens County Advertiser* [hereafter, Long Island Farmer], January 01, 1834.

¹⁹ *Laws of the State of New York* (1832), 452.

²⁰ ARJ, October 27, 1832, 691.

²¹ ARJ, October 27, 1832, 690.

broke ground on the first section of the B&J in November 1834 and progressed steadily until August 1835 when “the work was attended with some unavoidable delays...” after which the road was completed and opened for travel on April 18, 1836.²² The new railroad’s stops included Brooklyn, Bedford, Bushwick, Flatbush, East New York, Union Course, and Jamaica (Figure 5). Decisions as where to place stops was largely controlled by petition to the State Legislature and the extent to which a railroad presence would economically benefit a particular town. The best example of this process is the stop at Union Course, a popular horse-racing track near Jamaica that drew crowds of tens of thousands to its races. All parties involved were eager to encourage the travel of spectators to Union Course in order to facilitate the economic benefit of betting on races.²³

Before construction on the B&J was even begun, residents of New York City and several of the towns on Long Island (Figures 6-8) were clamoring for a railroad between Brooklyn and Jamaica and after it was completed, they saw the potential of the B&J to become part of the rail route connecting New York and Boston. This route, over Long Island, would provide the fastest travel time between the two cities yet developed.²⁴ The editors of the *Long Island Farmer* implored the railroad companies to “...take fair advantage of our level lands” to build a railroad across the whole of Long Island and, thinking even further

²² *Long Island Farmer*, September 17, 1834, August 26, 1835 & April 13, 1836; Mildred H. Smith, *Early History of the Long Island Railroad 1834-1900*, (Uniondale, NY: Salisbury Printers, 1958), 4.

²³ Nathaniel S. Prime, *A History of Long Island From its First Settlement by Europeans to the year 1845 with Special Reference to its Ecclesiastical Concerns*, (New York: Robert Carter, 1845), 71; Library of Congress. “Railroad Map of New England and Eastern New York compiled from the most authentic sources.” [hereafter, “Railroad Map of New England”] *Railroad Maps 1828-1900*. Accessed February 8, 2016. <https://lccn.loc.gov/98688377>.

²⁴ *Long Island Farmer*, January 12, 1832, January 8, 1834, January 22, 1834.

ahead, added “why may it not be met at Sag Harbor by good Steam Navigation to New-London and thence on the rail road...from that place to Boston?”²⁵ This idea prompted a group of men to form the Long Island Railroad Company (LIRRC) which was incorporated on April 24, 1834. The LIRRC was given two years to begin construction and six years after that date to finish construction or forfeit their charter.²⁶

In order to control the entire length of the route from Brooklyn to Greenport, and any possible associated steamboat service, the LIRRC wanted to be the primary railroad company operating on Long Island. This included the desire to purchase the tracks that the B&J operated and even the company if necessary. Negotiations between the B&J and the LIRRC began even before the latter was incorporated as a company. The *Long Island Farmer* reported in January 1834 that representatives from the two companies met to discuss terms of a possible collaboration, but no agreement was reached.²⁷ After over a year of talks the residents of Long Island, eager for construction on the LIRR to begin, proposed an alternate route that did not require the use of the B&J’s tracks. Instead of following the central corridor that the B&J started, the proposal suggested that the LIRRC construct a route through the north shore towns of Williamsburgh, Flushing, and North Hempstead (Figure 5).²⁸ After incorporation, negotiations resumed between the LIRRC and the B&J for the possible lease or purchase of B&J trackage,

²⁵ *Long Island Farmer*, January 12, 1832.

²⁶ *Laws of the State of New York Passed at the Fifty-Seventh Session of the Legislature Begun and Held at the City of Albany, the Seventh Day of January 1834*, (Albany, NY: E. Croswell, 1834), 231.

²⁷ *Long Island Farmer*, January 1, 1834.

²⁸ *Long Island Farmer*, October 21, 1835.

even in its unfinished state. The LIRRC's Board of Directors received and discussed "several propositions which had been submitted by the committee of the Brooklyn & Jamaica Rail Road Company" during its meeting on November 12, 1835.²⁹ Alternative LIRR route plans were rendered unnecessary when a compromise was finally reached in November 1835 for the LIRRC to lease the B&J tracks and the Board of Directors approved the measure at its meeting on November 26, 1835.

Particulars of the agreement were made public in the *Long Island Farmer* on December 2, 1835.³⁰ It called for the B&J to finish construction on its route and then turn operations over to the LIRRC, after which LIRRC would begin construction on its own route with the intention of using the monies made from running trains on the established line to pay the lease fees on the B&J tracks. The lease also allowed the B&J to maintain control of its other business, the Brooklyn and Jamaica Turnpike, and all roads and revenues from it. The LIRRC was to have rights of usage of the B&J tracks for the remainder of its contract with the State of New York: 45 years.³¹ Both parties agreed to an annual cost of \$33,300 per year payable to the B&J in monthly installments of \$2775 each. This re-payment plan was restructured several times during the 1840s as the financial difficulties plaguing the LIRRC grew.³²

²⁹ LIRRC Minutes, Book 1, November 12, 1835.

³⁰ LIRRC Minutes, Book 1, November 26, 1835; *Long Island Farmer*, December 2, 1835.

³¹ *Long Island Farmer*, December 2, 1835, June 3, 1842.

³² LIRRC Minutes, Book 1, October 7, 1840, June 3, 1842; E. B. Hinsdale, *History of the Long Island Railroad Company 1834-1898*, (New York: The Evening Post Job Printing House, 1898), 2.

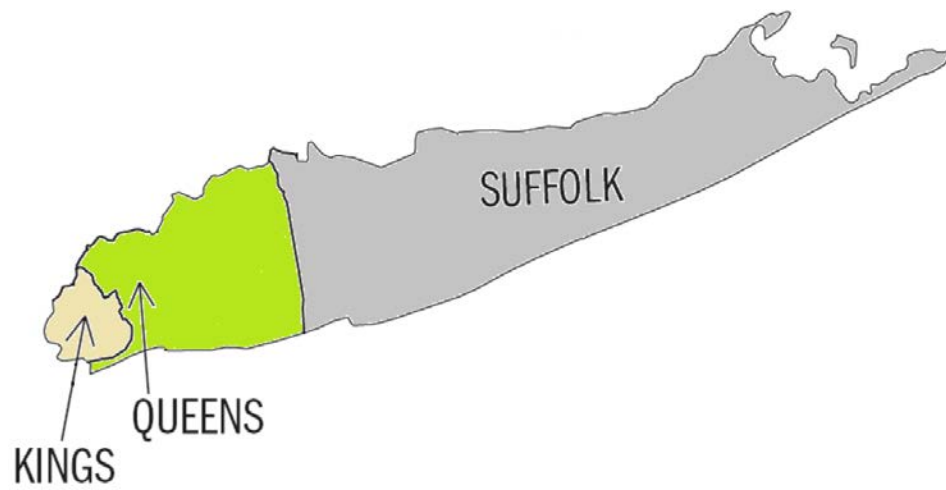


Figure 2: The Counties of Long Island (1832)

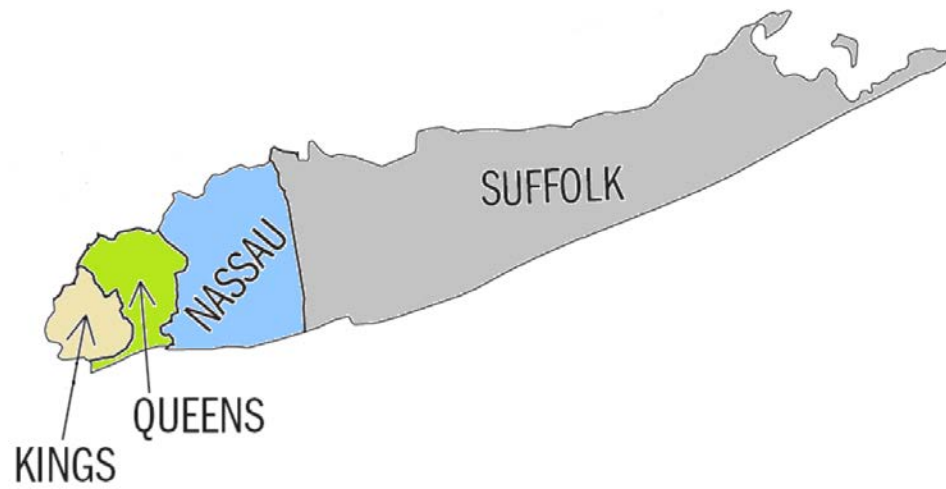
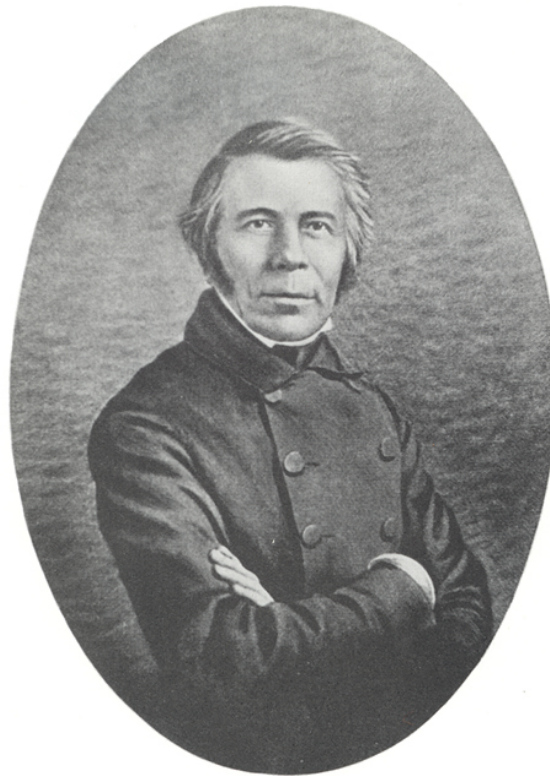


Figure 3: The Counties of Long Island (2016)



DAVID BATES DOUGLASS

Figure 4: David Bates Douglass (circa 1820), the Civil Engineer who designed the Brooklyn & Jamaica Railroad and was among the first to see the potential of expanding it into the LIRR.

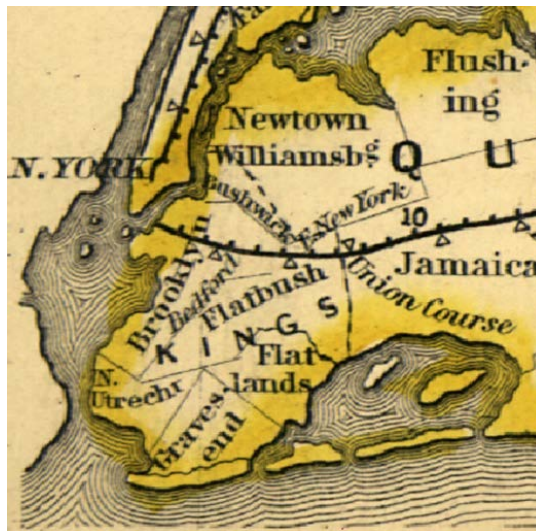


Figure 5: Map of the Brooklyn & Jamaica section of the LIRR (1849)

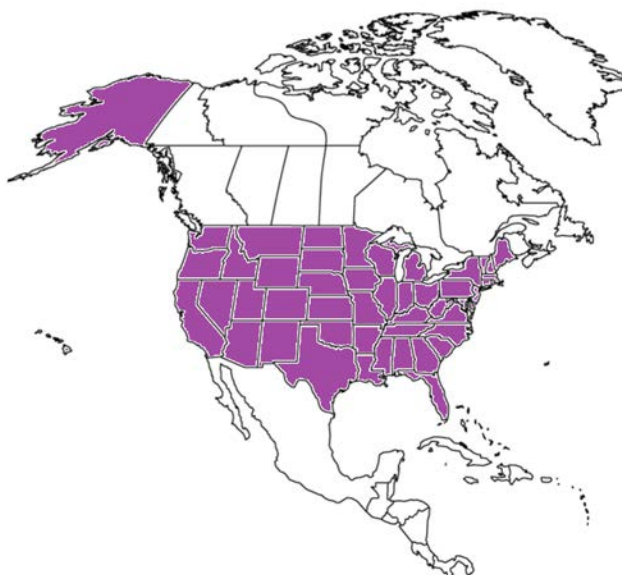


Figure 6: Map Showing the United States within North America



Figure 7: Map Showing New York State within the United States



Figure 8: Map Showing Long Island within New York State

Business Plan & Stockholders

The financial side of the LIRRC's business plan was relatively simple and logical. The company began with initial capital of \$1.5 million divided into 30,000 shares of stock worth \$50 each which were sold at the initial stock offering on June 17, 1835 (Figure 9) and subsequently at various other times when the company needed to raise money. Five dollars of each share was required to be paid upfront and the rest was "payable by installments, as may be ordered by the Board of Directors."³³ Payment for stock was, of course, accepted in full at the time of the sale, but more often it was paid in equal installments of five dollars each over the course of a few years. At \$50 per share and five dollars per installment, each share of stock required ten payments before it was completely paid off. However, there were few people who held only one share of stock, so installment payments ran in the hundreds or thousands of dollars for some stockholders; \$5,000 per installment for someone who held 1000 shares of stock. The Board of Directors issued notices in local newspapers of installment due dates and stockholders then paid the next installment by the date stated in the notice, usually a month or two after the notice was placed. A notice for an installment of LIRRC stock was issued on February 18, 1836 and "published in the newspapers printed on Long Island and four of the newspapers printed in the City of New York."³⁴

In November 1836, the LIRRC had its first encounter with delinquent stockholders during the lead up to the Panic of 1837 and formed a committee

³³ LIRRC Minutes, Book 1, June 17, 1835, June 18, 1835; Laws of the State of New York (1834), 231.

³⁴ LIRRC Minutes, Book 1, November 26, 1835, February 18, 1836.

of five men from the Board of Directors to “collect and settle all delinquencies.”³⁵ The Panic of 1837 engulfed the country in the late 1830s, but its effects lingered into the late 1840s. New York City was particularly hard-hit because of its status as a center of business and trade.³⁶ The Panic began with a sharp decline in the price of cotton that caused merchants in the southern United States to make less money and in turn default on loans made to them by northern businesses or banks. These businesses and banks had loans and agreements of their own that depended on receiving payment from their customers; when the payments stopped the banks failed. As the value of a business declined, so to did the value of its merchandise and some business owners resorted to arson in an attempt to reclaim the monetary value of their goods.³⁷ General merchandise was not the only area to experience a loss of value, the real estate market did as well. Contractors who purchased large amounts of land for future projects now found themselves unable to make mortgage payments and many were forced to abandon their projects to avoid drowning in debt. Collapsing railroad companies caused a trickle-down effect that spread the Panic to the manufacturing sectors of New York as well. Reduced orders for tracks, rails, boilers, and engines led to less work and therefore less income for iron workers whose shops closed by the dozens.³⁸ Railroads, as speculative businesses in the 1830s, were particularly affected

³⁵ LIRRC Minutes, Book 1, November 7, 1836.

³⁶ Edwin G. Burrows and Mike Wallace, *Gotham: A History of New York City to 1898*, (New York: Oxford University Press, 1999), 611-612.

³⁷ Burrows & Wallace, 611-612.

³⁸ Burrows & Wallace, 612-613.

by this crisis because it reduced the number of people willing to invest in anything even remotely modern or uncertain.

As the economic climate deteriorated into the late 1830s, the LIRRC faced many more encounters with stockholders who defaulted on their installment payments. In its minutes for January 4, 1837, the LIRRC Board of Directors lists five men, by name, who lost their stockholder privileges for non-payment of installments and authorized the selling of those shares to new owners who could pay. The total number of forfeited shares was 995 and given that there were two additional calls for installments after from the first, these shares represented \$4,975 in lost revenue if delinquent for one call and \$9,950 if delinquent for both. A list of new stockholders and how many shares each man purchased was published in the minutes for the next meeting.³⁹

As the Panic of 1837 intensified, 3286 more shares of stock were forfeited for non-payment in February 1837 resulting in \$16,430 lost from this revenue stream. In order to reduce the number of defaulting stockholders, the LIRRC agreed to change its installment payment policy after an outcry from the stockholders themselves. Under the new policy, the installment due on April 10, 1837 was divided in half so that \$2.50 per share was due on April 10 and \$2.50 per share was due on May 10. The company still received the same amount of money, but the payments were easier for stockholders to afford in the middle of a financial crisis.⁴⁰ Because of the lack of money coming in from stock installments, the LIRRC discussed a construction stoppage in early April

³⁹ LIRRC Minutes, Book 1, January 4, 1837, January 9, 1837.

⁴⁰ LIRRC Minutes, Book 1, February 28, 1837, March 25, 1837, April 3, 1837.

1837 and executed one on April 5 citing uncertainty in the “money market;” the half installment due on May 10 was also cancelled for this reason.⁴¹ Further non-payment instances between April and June 1837 caused the Board of Directors to issue a “notification to delinquent stockholders” saying unless all back payments were received by July 20, 1837 “legal proceedings will be instituted to compel the payment of the same.” This gave stockholders less than one month to come up with the money they owed. Given that the next time these legal measures were mentioned was several months later, the company was clearly unable or unwilling to act quickly to recover their lost revenue.⁴² Attitudes had changed by November 1841 as the Panic of 1837 continued into its fourth year, however. The LIRRC Board agreed to “...cancel all installments and debts due to this company from said delinquents upon condition that they give to the company a full transfer of the stock standing on their name...”⁴³ In other words, the company would not pursue legal action against stockholders for non-payment provided they willingly gave up claim to their shares of stock. After so many stockholders defaulted on payments, the LIRRC was hesitant about calling for any further installments, but in April 1842 they did just that. The Board of Directors debated and eventually voted, seven to two, in favor of it and notified stockholders that a payment of 25 cents per share was due on May 1, 1842. A stockholder with 1000 shares owed only \$250 instead of the \$5,000 he originally owed or even the \$2,500 under the first revision of the installment plan. Even though this installment was 20 times

⁴¹ LIRRC Minutes, Book 1, April 5, 1837.

⁴² LIRRC Minutes, Book 1, June 29, 1837, October 3, 1837, May 31, 1838.

⁴³ LIRRC Minutes, Book 1, November 16, 1841.

less than its original value, it still helped the LIRRC to meet some of its mounting obligations instead of defaulting on them and kept more stock in circulation that might be called upon for future installments.⁴⁴ In July 1842, 340 more shares of stock were forfeited.⁴⁵

⁴⁴ LIRRC Minutes, Book 1, April 4, 1842, April 22, 1842.

⁴⁵ LIRRC Minutes, Book 1, July 26, 1842.

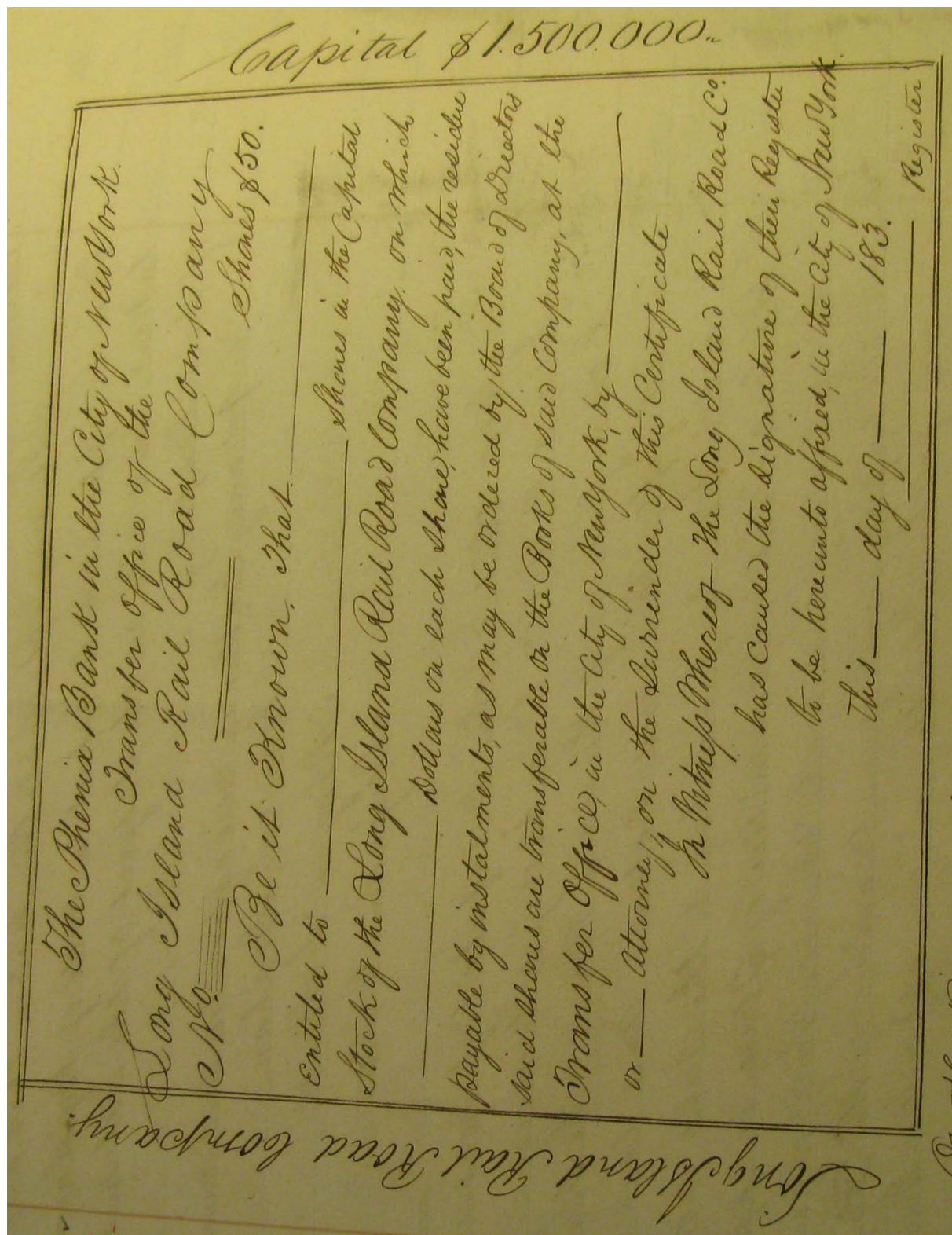


Figure 9: Facsimile of an LIRRC Stock Certificate sold at the company's initial stock offering on June 17, 1835.

Relationship with the B&J

The LIRRC planned to use the money gained from payment of stock installments to pay its expenses during construction, before the railroad could make money for itself. Among the greatest of these expenses, aside from construction costs, were the lease fees on the B&J tracks.⁴⁶ The company kept up paying its debts through the Panic of 1837 and only ran into trouble paying the B&J lease fees in May 1838 when it sent a committee to negotiate for a reduction in their cost. Negotiations continued until an agreement was reached in August 1838.⁴⁷ By October 1840, financial straits were dire. The LIRRC again approached the B&J regarding the lease between the two companies. The LIRRC Board of Directors stated in their minutes of October 7, 1840 that they had been under lease with the B&J for four years at a rent of \$33,300 per year which amounted to \$133,200 total, but had only paid \$108,316 total with a deficit of \$24,884. The LIRRC proposed “the modification or suspension of said lease until...by the further construction or completion of the Long Island R. R. the company will be able to fulfill the terms of the said lease from the profits arising from the operations of said roads...”⁴⁸ In December 1840, bonds in the amount of \$21,500 were issued to the B&J for lease fees in lieu of cash payments and a revised payment schedule was set up whereby the LIRRC would pay the full amount of the bonds to the B&J, in

⁴⁶ LIRRC Minutes, Book 1, January 16, 1837, October 7, 1840.

⁴⁷ LIRRC Minutes, Book 1, May 21, 1838, July 10, 1838, August 13, 1838.

⁴⁸ LIRRC Minutes, Book 1, October 7, 1840, June 3, 1842.

ten installments of \$2,150 each, by December 1845.⁴⁹ The bonds only delayed further action by the B&J.

With the Panic of 1837 lingering on, and the LIRR unfinished, the company had trouble making even the lower lease fee payments to the B&J. The LIRRC received a loan from the State of New York in 1840 to finish the railroad route to Greenport, but the terms of the loan specified that the company could not use any of the funds to pay existing debts, and with little income from the existing trains coming in, there was little money to pay those debts. The B&J was anxious to receive lease payments from the LIRRC and when, in June 1842, they failed to pay once again, B&J president John A. King sent a letter to LIRRC President George Fisk demanding "...a sum not less than three thousand dollars in the course of six days..." otherwise the B&J "...shall take the most prompt and efficient legal measures to collect the amount due this company."⁵⁰ In response to King's letter, the Board of Directors of the LIRRC issued a series of resolutions outlining the many financial hardships the company had endured since signing the original lease with the B&J in 1836. Track and car maintenance costs, lease fees, construction costs to finish the LIRR, work stoppages, and the effects of the Panic of 1837 all made the list.⁵¹ The Board also stated that a number of their largest stockholders threatened to withhold stock installment payments "...until the relations between the two companies can be placed upon a more

⁴⁹ LIRRC Minutes, Book 1, December 15, 1840.

⁵⁰ LIRRC Minutes, Book 1, June 3, 1842.

⁵¹ LIRRC Minutes, Book 1, June 3, 1842, June 14, 1842.

equitable footing.”⁵² Wishing to keep their stockholders content, the LIRRC Board added a resolution to “suspend all further operations...until this question is satisfactorily adjusted” to the document sent to the B&J.⁵³ Stopping construction on the railroad, or threatening to, was a harsh tactic that illustrated how far the LIRRC was willing to go to protect its own interests and make the B&J more amenable to conversation.

More letters changed hands between the presidents of the B&J and the LIRRC in June 1842 and the LIRRC again proposed changes to the terms of the lease. It would pay the \$3,000 it owed to the B&J, if the B&J forgave all the LIRRC’s past unpaid lease and bond fees. The LIRRC also wanted to lower the lease fees to \$6,000 per year until December 1845 or the completion of the railroad, whichever came first. Minutes from the meeting of the LIRRC Board of Directors from June 21 state that the B&J was not interested in negotiating further lease adjustments, it was more interested in getting the money that was immediately owed to it.⁵⁴ After the threat of halting construction, the B&J firmly said it would not entertain further negotiations and expected the LIRRC to keep up the established payment plan. So, it came as a surprise when the negotiating committee reported in September 1842 that the B&J accepted the LIRRC’s proposal of \$6,000 per year until 1845 or the completion of the railroad. These terms were less than favorable toward the B&J. The lease started out at \$33,300 per year and was now reduced to \$6,000, but reducing the rent at this point allowed more funds to be directed

⁵² LIRRC Minutes, Book 1, June 3, 1842.

⁵³ LIRRC Minutes, Book 1, June 3, 1842.

⁵⁴ LIRRC Minutes, Book 1, June 14, 1842, June 21, 1842.

toward finishing the railroad and the eventual goal of paying lease fees from the income it provided.⁵⁵ The two companies found the “more equal footing” they looked for, but the truce was an uneasy one.⁵⁶

Unease turned once again to conflict in April 1844 when the LIRRC sent a committee to discuss with the B&J “what aid will be given in the construction of the proper tunnel on Atlantic Street....”⁵⁷ The LIRRC reasoned that since the new tunnel was on the section of the road built by the B&J, the B&J should bear some of the financial burden for its construction. Of course, the LIRRC was still in poor shape financially and no doubt wanted to share the costs for that reason as well. The Board also supplied the committee with a proposal to purchase the B&J trackage outright in an effort to avoid the repeated negotiations and arguments over lease fees.⁵⁸ Nothing more was said by the Board of Directors on these specific issues, or any issues, between the LIRRC and the B&J for nearly two years. However, issues clearly still existed because in January 1846 a committee of arbiters was formed, comprising representatives from both companies, to “settle the unhappy differences existing between the two companies.”⁵⁹

What the differences were became clear in August 1846 when the Board of Directors of the LIRRC sent a committee to the B&J to discuss a payment dispute, the exact amount owed again in dispute. A copy of the LIRRC’s annual report was given to the B&J to provide income numbers and

⁵⁵ LIRRC Minutes, Book 1, June 21, 1842, September 16, 1842.

⁵⁶ LIRRC Minutes, Book 1, June 3, 1842.

⁵⁷ LIRRC Minutes, Book 1, April 2, 1844.

⁵⁸ LIRRC Minutes, Book 1, April 2, 1844.

⁵⁹ Long Island Railroad Company Board of Directors Meeting Minutes [hereafter, LIRRC Minutes], January 31, 1846, Book 2, Box 305, PennCentral Collection, New York Public Library, New York, NY.

show the LIRRC had little money to spare in light of maintenance costs and other debts.⁶⁰ The next communication between the two companies was recorded on May 28, 1847 after a complete change of leadership within the LIRRC. George Fisk was asked by six of the thirteen members of the Board of Directors to resign as president in May 1846, but resolved to let the stockholders decide his fate during the next election. In February 1847, the election removed him from office and swept in James Weeks as president along with an entirely new Board of Directors.

The new Board was comprised of men whose profession was business as opposed to the previous regime whose profession was more gentleman than businessman. It was this Board that declared “the existing condition of the Long Island RRC are such that they cannot accept and now decline the terms proposed by the Brooklyn and Jamaica RRC” which called for a return to the original lease fees \$33,300 per year now than the year 1845 was passed and the LIRRC had been up and running for the past two years.⁶¹ President Weeks proposed a counteroffer of \$10,000 upfront and then \$20,000 per year to be paid in equal monthly installments and also 10 percent of whatever income over \$150,000 the LIRRC brought in, provided that all of those parts added up to not more than \$33,300 in any given year. He also added sharply that the B&J should “consider this proposition a liberal one on their part.”⁶² Weeks’ point is well taken. His negotiating styles and proposals for lease modification are significantly different than those of George Fisk,

⁶⁰ LIRRC Minutes, Book 2, August 5, 1846, December 10, 1846.

⁶¹ LIRRC Minutes, Book 2, May 8, 1846, April 7, 1847, May 28, 1847.

⁶² LIRRC Minutes, Book 2, May 28, 1847.

owing to the difference in profession between the two men. The new style paid off, only a week later, the B&J sent back the proposal with slight changes, but indicated that most of it was acceptable. On June 9, 1847 the LIRRC and the B&J agreed to terms of \$10,000 upfront, \$21,000 per year, and 14 percent of the LIRRC's income over \$150,000. These terms remained in effect, unchanged, until May 29, 1857 when the LIRRC sold its lease of the B&J to Ira Smith and Montgomery Queen, so they might found the Brooklyn Central Railroad.⁶³

⁶³ LIRRC Minutes, Book 2, June 9, 1847; Long Island Railroad Company Board of Directors Meeting Minutes [hereafter, LIRRC Minutes], February 19, 1857 & May 29, 1857, Book 3, Box 305, PennCentral Collection, New York Public Library, New York, NY; *Long Island Farmer*, February 16, 1847; *American Railroad Journal*, January 27, 1849, 52; Henry V. Poor, *History of the Railroads and Canals of the United States of America Exhibiting their Progress, Cost, Revenues, Expenditures, and Present Condition*, (New York: John Schultz and Co., 1860), 240.

Beginning Construction (1836-1840)

With the land survey it commissioned two years earlier in hand, the LIRRC broke ground on construction of a segment from the terminus of the B&J trackage to the town of Jericho on March 31, 1836.⁶⁴ The land survey, conducted by the company's engineer William McNeil, gave three options of possible routes to build along: north coast, north-central, and southern. The north coast route ran through the port cities of the northern shore of Long Island including Flushing and North Hempstead, as the citizens of Long Island had suggested during the negotiations stalemate between the B&J and the LIRRC a few years earlier. The north-central route followed a similar route to the north coast but was situated more inland and passed through one of the best farming areas on the island. The southern route, ran through the unsettled and barren middle of the island and presented the best opportunity for fast travel (Figure 10).⁶⁵ Harbor Hill Moraine is a principal natural feature of western Long Island and was a deciding factor in which potential route to choose (Figure 11). Choosing the north route would benefit the coastal communities, but also force the builders to contend with uneven terrain and numerous bays and inlets on the north side of the moraine. Selecting the north-central route would aid the farmers of the area with transporting produce more quickly, but required an increased grade for the tracks to climb the moraine hills. From a construction perspective, the easiest option was the southern route which passed south of the moraine and avoided any of the hilly

⁶⁴ *Long Island Farmer*, February 24, 1836.

⁶⁵ Smith, 3; Ralph Henry Gabriel, *The Evolution of Long Island: A Story of Land and Sea*, (New Haven, CT: Yale University Press, 1921), 134.

area around it altogether.⁶⁶ In a move that exemplifies what Ralph Gabriel calls “the shortsightedness of the founders of the company,” the LIRRC chose the southern route because it would be the cheapest and easiest to build; reminiscent of the B&J decision after Douglass’ survey.⁶⁷ Connecting New York and Boston with one continuous transportation system was the most important aspect of the project, aside from completing it as quickly as possible, and as such any future needs of Long Islanders came second.

Construction to Jericho proceeded without delay and by October 1836, the LIRRC was confident of soon completing construction to its next station in the village of Hempstead.⁶⁸ In March 1838, not only was the railroad completed to Hempstead, but also to the next station of Hicksville. Long Islanders were eager to have even a portion of the railroad open and the company, eager itself for the line to be operational, started service from Hicksville to Brooklyn on March 1, 1837. LIRR passenger trains left from Hicksville, Jamaica, and Brooklyn six days per week at 8am, 8:30am, and 9:45am respectively; an afternoon train was also offered from those locations at 2pm, 2:45pm, and 4pm respectively. In addition to Hicksville, Jamaica, and Brooklyn the trains also picked up and discharged passengers at Westbury, Hempstead, Union Course, and Bedford. Separate freight trains left Hicksville at 8am and Brooklyn at 4pm six days per week (Figure 10). After initially deciding in the affirmative before construction began, the LIRRC’s Board of

⁶⁶ United States Geologic Survey, “Topography of Long Island.” [hereafter, “Topography of Long Island”] *New York Water Science Center, State of the Aquifer*, <http://ny.water.usgs.gov/projects/SOTA/location.html>

⁶⁷ Gabriel, 135; *Long Island Farmer*, March 9, 1836.

⁶⁸ *ARJ*, October 15, 1836; LIRRC Minutes, Book 2, February 18, 1836, September 19, 1836.

Directors later made the decision not to run trains on Sundays; the decision was made mostly for religious reasons after an outcry from some Long Islanders on the topic.⁶⁹

Despite the speedy pace at which the Jamaica to Hicksville segment was completed, Hicksville remained the eastern terminus of the LIRR for nearly four years due to the effects of the Panic of 1837. LIRR's Board of Directors issued the order that "...all operations on the line of the Long Island Rail Road beyond and east of Hicksville...be entirely suspended for the present" on April 5, 1837. Work was also stopped on the surveys of the future Hempstead and Williamsburgh branches.⁷⁰ In July 1837, as the work stoppage continued into its third month, some Long Island citizens saw the truth of the situation and realized it was no small problem. It was still in effect during the July 4th celebration in Hempstead where residents vented their frustrations and also expressed their sympathies with the LIRR. A Long Island resident named Reuben Shaw gave the following toast, "The Hempstead branch railroad, may we live to see its completion—though the age of Methuselah may be exceeded," and another resident named E. Webb toasted, "The years 1776 and 1837 the most remarkable in American history, the first tried men's souls, the latter their pockets."⁷¹

Now that the Hicksville to Brooklyn track was complete, the LIRR ran trains on it seven days per week and generated enough revenue to keep the company afloat during the Panic of 1837. At their November 27, 1837 meeting,

⁶⁹ *Long Island Farmer*, March 1, 1837; LIRR Minutes, Book 2, September 1, 1836.

⁷⁰ LIRR Minutes, Book 2, April 5, 1837.

⁷¹ *Long Island Farmer*, July 12, 1837; *ARJ*, July 1, 1837.

the LIRRC Board of Directors voted to increase fares from 50 cents to 75 cents for through passengers between Hicksville and Brooklyn and also that “pro-rata pricing be charged” for intermediate stops.⁷² By November 1837, the work stoppage on the LIRR east of Hicksville entered its sixth month. That same month, the Stonington Railroad, a possible competitor to the LIRR, opened and began rail and steamboat service from Stonington to New York. Long Island residents again questioned when the railroad on their land would be up and running; “when will the land travel be complete between the two cities [New York and Boston] via the Long Island Railroad? Let the directors of our road answer,” the *Long Island Farmer* mused.⁷³

Realizing they needed greater financial help to jumpstart construction beyond simply raising fares, the LIRRC Board of Directors voted to petition the Legislature of the State of New York to pass a law giving the company a loan to finish construction. The connection between New York and Boston was so important, they reasoned, that no one invested in it could afford to let it go unfinished.⁷⁴ The Board also resolved to petition the state for an extension of time in which to finish construction. The company’s incorporation charter initially allowed six years to complete the railroad to Greenport, and in February 1838 four of those years had elapsed with only a fraction of the road completed.⁷⁵ While these motions were in progress, the LIRRC pressed on with the land survey for the Hempstead branch, to run from Hempstead

⁷² LIRRC Minutes, Book 1, March 25, 1837, October 25, 1837, November 27, 1837; *Long Island Farmer* September 6, 1837, October 4, 1837.

⁷³ *Long Island Farmer*, November 22, 1837.

⁷⁴ LIRRC Minutes, Book 1, January 9, 1838, December 24, 1838.

⁷⁵ LIRRC Minutes, Book 1, February 20, 1838; *Long Island Farmer*, February 28, 1838; *Laws of the State of NY* (1834), 237; Hinsdale, 3-4.

Station to Hempstead Village, and completed it in July 1838. By October 1838, the company was advertising for contracts to build the branch. Construction resumed on the Hempstead railroad in March 1839 and the entirety of the road was completed in July 1839.⁷⁶ The State granted an extension in April 1839 which gave the LIRRC ten more years to finish the railroad to Greenport and also authorized the building of any “branch rail-roads in any part of Long Island as they [the LIRRC] may deem expedient and necessary.” It could only do so, however, if the land along the route it wished to build was given to the company for free. Otherwise, the LIRRC was not allowed to expend money on branch railroads until the line to Greenport was finished and operational.⁷⁷

The LIRRC also made some progress toward its overall goal of reaching Greenport when a land survey to determine possible routes began. Unfortunately, after the company’s two most experienced engineers, William McNeill and James Shipman, left the LIRRC in mid-1838, the survey was left unfinished.⁷⁸ In December 1839, residents of Long Island living along the proposed ‘northern route’ commissioned civil engineer Edward Shotwell to finish the land survey McNeill and Shipman started. Shotwell prepared a report and submitted it to the *American Railroad Journal* for publication in early 1840. His hope, and that of his clients, was that the LIRRC might read the article, realize its merits, and reach out to him for further information. The report explained in technical detail Shotwell’s professional opinion on the best path

⁷⁶ Smith, 6; LIRRC Minutes, Book 1, July 24, 1838, October 18, 1838.

⁷⁷ *Laws of the State of New York Passed at the Sixty-Second Session of the Legislature Begun and Held at the City of Albany, the First Day of January 1839*, 265-266.

⁷⁸ *Long Island Farmer*, December 5, 1838; LIRRC Minutes, Book 1, April 17, 1838, July 2, 1838.

for the northern route to take using local landmarks. It also suggested locations for potential stations including Oyster Bay and Smithtown, two cities which are completely bypassed in path of the 'southern route' the company eventually adopted.⁷⁹

On April 29, 1840 "An Act to Aid in the Construction of the Long Island Railroad" was passed by the New York State Legislature giving the company a loan from the state of \$100,000 for the express purpose of finishing the route to Greenport. The Act included a stipulation that the money was only to be used for the purchase of materials and labor and not for the payment of any outstanding debts.⁸⁰ It is because of this loan from the State that the LIRRC's grand plan of connecting New York and Boston was saved from complete failure.

⁷⁹ ARJ, January 1, 1840, 17-21.

⁸⁰ *Laws of the State of New York Passed at the Sixty-Third Session of the Legislature Begun and Held at the City of Albany, the Seventh Day of January 1840*, 141-143.

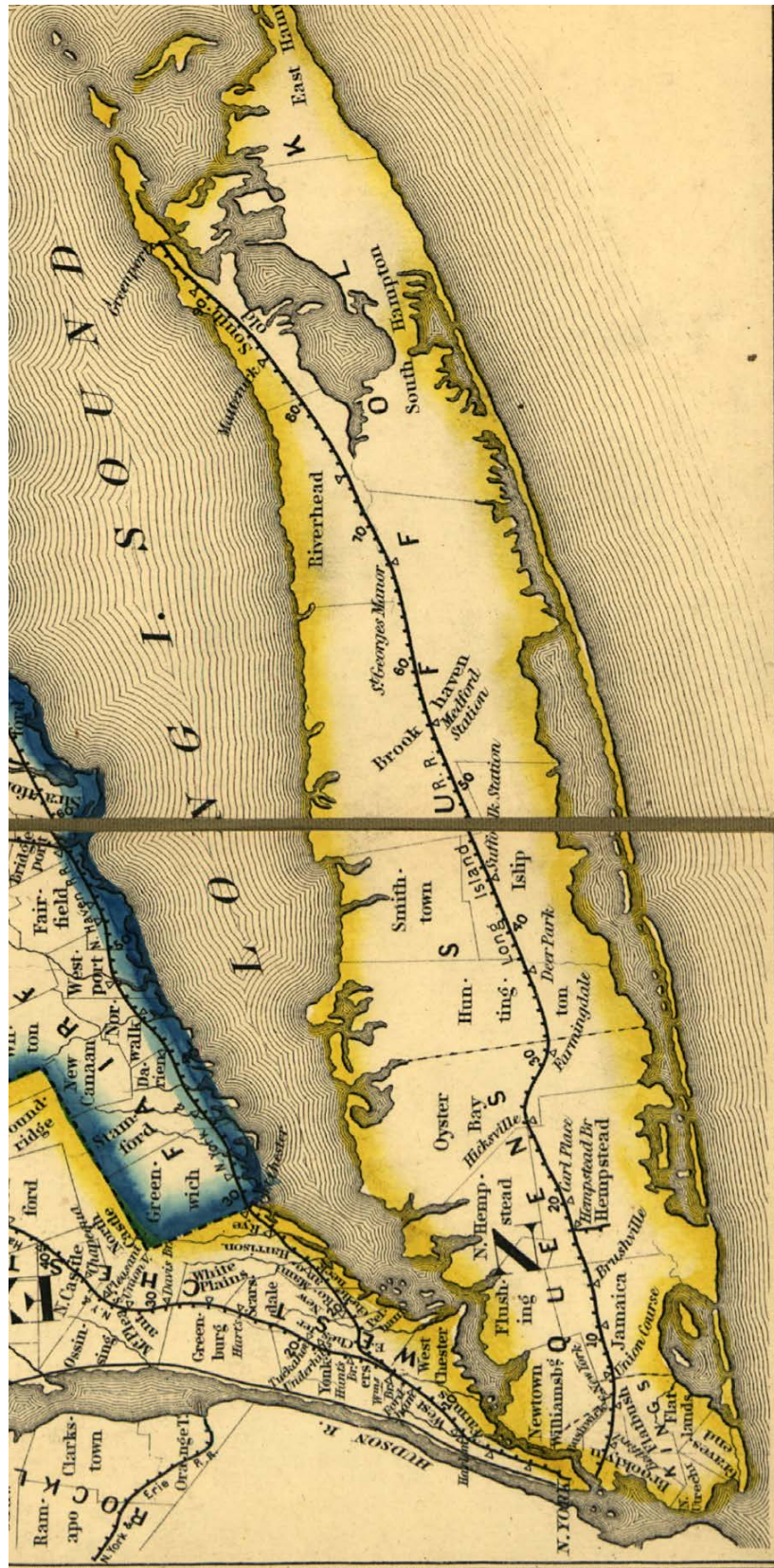


Figure 10: Map of the Entire Route of the LIRR (1849)

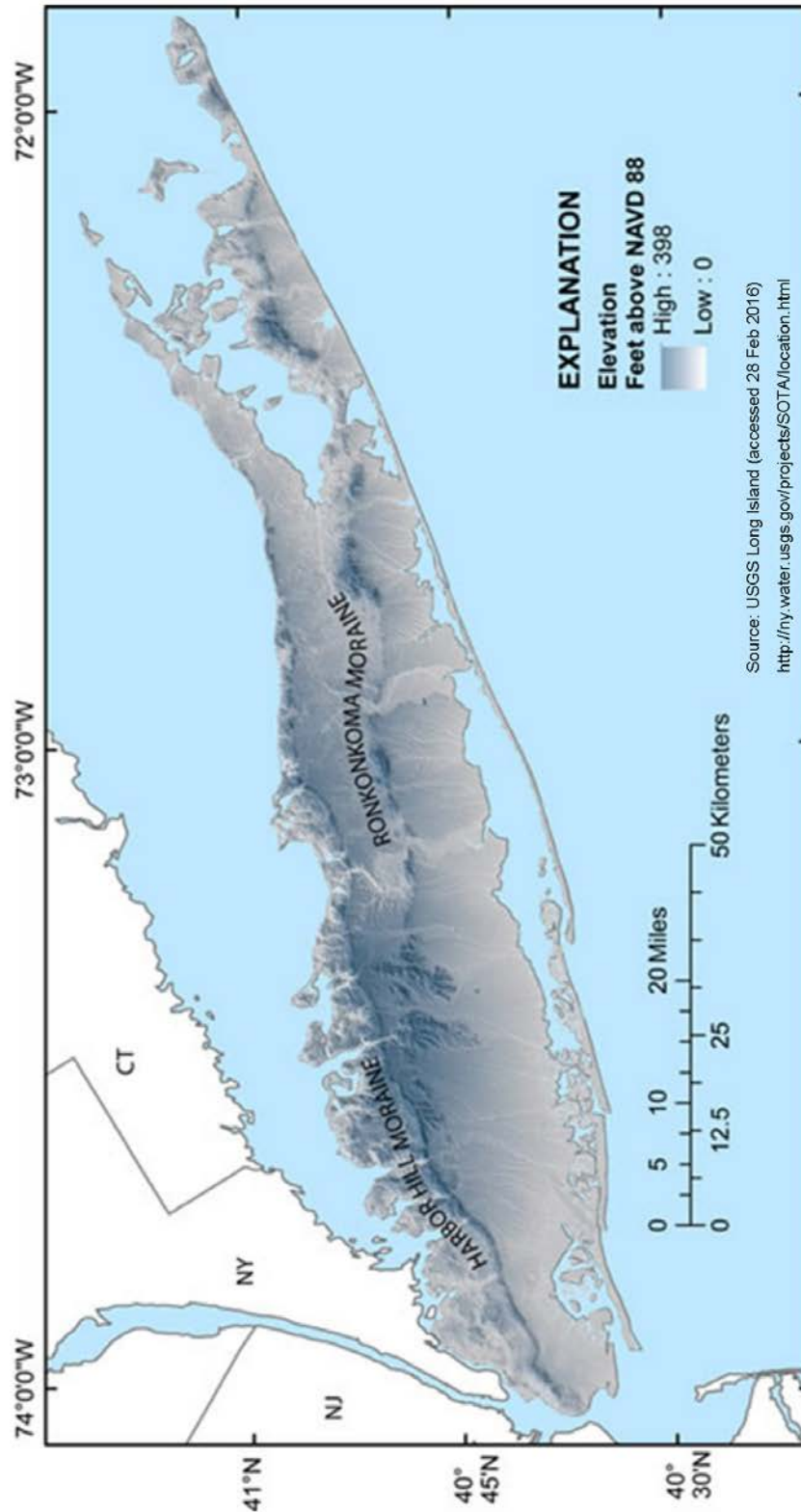


Figure 11: Topographic Map of Long Island showing the two Moraines the LIRR encountered during surveying and construction.

Finishing Construction (1840-1844)

Civil engineer James Shipman returned to the LIRRC in December 1840 and continued the land survey of the area east of Hicksville and presented his report to the Board of Directors at their meeting on January 26, 1841. The original survey request was for both northern and southern routes but, seeing that Shotwell had completed the northern survey a year earlier, Shipman moved to complete the southern one as well and give the LIRRC balanced options for moving forward.⁸¹ Minutes from this meeting of the Board of Directors show that the southern route was chosen as the better of the two. The minutes also give the breakdown of votes of “ayes” and “noes,” the final vote was seven in favor and one opposed; the dissenting vote belonged to Valentine Hicks (Figure 12), a former president of the LIRRC. At this same meeting, the specific point to which construction would proceed was also decided: Half Hollow Hills, a small village near Huntington.⁸² The Board of Directors also realized Shipman’s proposed route needed to be altered to avoid a series of hills that extend south of the Harbor Hill Moraine. This was the reason the track curved between Hicksville and Farmingdale. Farther down the line, near Brookhaven, the railroad encountered the Ronkonkoma Moraine which extends into southeastern Long Island and was the primary reason the LIRR path turned northeast toward Greenport (Figure 11).⁸³

Construction on the Williamsburgh branch, stopped since 1837, was raised at a LIRRC Board of Directors meeting on February 6, 1841. The Board

⁸¹ LIRRC Minutes, Book 1, December 15, 1840 & January 26, 1841.

⁸² LIRRC Minutes, Book 1, January 26, 1841.

⁸³ LIRRC Minutes, Book 1, January 26, 1841 & February 6, 1841; “Topography of Long Island.”

answered inquiries from the public by saying construction would resume “...whenever the right of way shall be offered as a gift and the funds of this company will afford the means of completing said branch.”⁸⁴ The company was waiting for the land in its path to be given as a gift and for its finances to improve significantly. In other words, work on the Williamsburgh branch would not resume any time in the near future. One of the stipulations of the loan the LIRRC received from the State of New York was that the money could not be used for any purpose other than completing the originally contracted route from Brooklyn to Greenport. And, even when that route was finished, the LIRRC still had numerous other loans and other debts to settle before enjoying any true profits.⁸⁵

Section by section the opening of the entire LIRR came closer to reality. In October 1841, the section of railroad between Hicksville and Farmingdale opened to great fanfare. After four years of work stoppage, and a slow revival afterward, the company was once again on its way.⁸⁶ Momentum carried construction onward, and the tracks from Farmingdale to Deer Park opened in March 1842 followed by Deer Park to Suffolk Station in July 1842 (Figure 10). By August 1843, the land survey of the easternmost section was in progress while construction continued in other areas.⁸⁷

As the LIRRC entered 1844, citizens of Long Island and the company were optimistic this would be the year the railroad was finished. Print coverage

⁸⁴ LIRRC Minutes, Book 1, February 6, 1841.

⁸⁵ *Laws of the State of New York* (1840), 141-143.

⁸⁶ Poor, 265.

⁸⁷ LIRRC Minutes, Book 1, September 16, 1842, August 2, 1843, August 14, 1843; *Long Island Farmer*, October 10, 1843; *The New World*, August 5, 1843, 152.

of construction, travel times, and speculation about steamboats greatly increased in the lead-up to the opening of the LIRR's service from Brooklyn to Greenport. Not to mention coverage of the completion of the long-awaited connection between Boston and New York.⁸⁸ In January 1844, the Board of Directors discussed the possibility of an extension of service to the Brooklyn waterfront to provide a link with Long Island to passengers and freight traveling from Manhattan. The service would establish a LIRR station and wharf on Atlantic Street to receive passengers and freight from the Manhattan ferry lines. In February, the Board made the petition official and in April it was approved by the City of Brooklyn.⁸⁹ To comply with a City of Brooklyn law that no steam power be used above ground within city limits and also "faced with problems of traffic congestion, accidents on the street, and the grade to New York harbor, the railroad determined that a tunnel under the western end of Atlantic Street would eliminate all of these obstacles."⁹⁰ A complete transcription of the ordinance giving the LIRRC permission to build the tunnel is included in the record of the Board of Directors meeting on April 2, 1844. It states the construction method and materials to be used, the location and extent of the tunnel using street names, the inclusion of ventilation ducts, and what machinery would be run in it.⁹¹ Three men formed the group that designed and built the Atlantic Avenue Tunnel: architect Asa Stebbins, engineer William Vibbert, and builder William Beard. The tunnel was

⁸⁸ *Long Island Farmer*, February 18, 1844.

⁸⁹ LIRRC Minutes, Book 1, January 2, 1844, February 29, 1844, April 2, 1844, April 4, 1844.

⁹⁰ NRHP, Page 5.

⁹¹ LIRRC Minutes, Book 1, April 2, 1844.

constructed using a method similar to that the Romans used to build aqueducts called the “cut and cover method whereby a trench is first excavated, the tunnel constructed, and the ground filled in.” ‘Cut and cover’ was chosen as the appropriate method of construction because of its usefulness in projects involving soft soil materials that could be dug as opposed to solid rock which required chipping or blasting to create openings. Work progressed until December 1844 when the tunnel opened and extended the LIRR’s track and service.⁹² When it was completed, the LIRRC ordered that the dates of beginning and completion, names of the officers and Board of Directors, names of the engineer and builders, and name of the company be inscribed on the inside wall of the tunnel as a permanent remembrance of when it was built and by whom.⁹³

As the middle of 1844 neared, topography slowed construction of the last section of the railroad. The builders also had to contend with the late arrival of a shipment of iron rails from England. To expedite construction, and ensure completion by the LIRRC’s planned finish date of July 1, 1844, a two-way building strategy began, with one crew laying track from Greenport west to St. George’s Manor and the other from Suffolk Station east to St. George’s Manor. As soon as the segment from Suffolk Station to Medford was completed in June 1844 it was opened (Figure 10). The two sections of track were finally joined together in late July, after further shipping delays from

⁹² LIRRC Minutes, Book 1, April 2, 1844, April 4, 1844, June 5, 1844; NRHP, 1-4; *The Liberator*, December 20, 1844, 204.

⁹³ LIRRC Minutes, Book 1, November 26, 1844.

England and much dismay from Long Island residents at the delay of the opening by nearly a month.⁹⁴

The first through train from Brooklyn to Greenport ran on July 27, 1844 as an inspection train for the Board of Directors and “various influential people” to survey the finished route.⁹⁵ These influential people included, the presidents of nearly all the railroad companies in New England, the mayor of Manhattan, the mayor of Brooklyn, the captains of several steamboats, anyone who loaned the company money to keep construction going, and of course all the stockholders of the LIRRC. The *New York Herald* reported the next day that the trip from Brooklyn to Greenport took three and a half hours and called the train’s first efforts “good traveling” and hoped that “...in point of speed and safety the Long Island Railroad will stand without a rival.”⁹⁶ The Board of Directors had an even more opulent celebration planned for July 30. Hundreds of invitees, many from the same group as the July 27 outing, departed from Brooklyn for a second train journey.⁹⁷ When the train reached Greenport, it was met by a cheering crowd of citizens from all over Long Island who turned out to see the new locomotive in action. The guests of the LIRRC were treated to dinner on a grand scale followed by dozens of speeches each recognizing the magnitude of the accomplishment. Joseph Sprague, the mayor of Brooklyn, in particular spoke of George Fisk, president of the LIRRC, who under “extraordinary difficulties and discouragements persevered to final

⁹⁴ *Long Island Farmer*, July 16, 1844; Smith, 8; Poor, 265; Hinsdale, 4.

⁹⁵ LIRRC Minutes, Book 1, July 19, 1844.

⁹⁶ *New York Herald*, July 28, 1844; LIRRC Minutes, Book 1, July 19, 1844.

⁹⁷ LIRRC Minutes, Book 1, July 19, 1844.

triumph.”⁹⁸ Fisk, for his part, replied that the completion of the LIRR was a “bright and ample reward for the years of anxiety and embarrassment...” the company experienced during the early years of its existence and the Panic of 1837 when eventually running trains to Greenport was far from a sure thing.⁹⁹ The railroad was opened to the general public on August 1, 1844.

⁹⁸ *Long Island Farmer*, August 6, 1844; Smith, 8-9.

⁹⁹ *Long Island Farmer*, August 6, 1844.



Figure 12: Valentine Hicks, second President of the LIRRC and one of its Founders and original board members. The town of Hicksville on Long Island is named for him.

Steamboats

Even before the railroad portion of the LIRR was completed, the company discussed the other crucial element of their New York to Boston connection: steamboats. They needed one or more steamboats to carry passengers and freight across Long Island Sound to connect with railroads on the opposite shore. The LIRRC had only a few months in which to find boats, negotiate lease or purchase terms, and form agreements with railroad companies. The Board of Directors of the LIRRC sought to “confer with the Transportation Co., Mr. Vanderbilt, and any other parties in relation to the transportation of passengers and freight...” in March 1844.¹⁰⁰ During this same meeting, a committee was formed comprised of Alfred Brooks, E. H. Daly, and John Rankin, members of the Board of Directors, to conduct these conferences on steamboat options and give a report on their results. Possible schedules were also debated including morning versus evening and summer versus off-season runs.¹⁰¹

Cornelius Vanderbilt was an obvious choice as a potential collaborator. He had gained almost as much notoriety for his business practices with steamboat lines on the Hudson River and Long Island Sound as he would garner with railroads later in the century. Because of the LIRRC’s past and present financial difficulties, few companies were willing to collaborate with it on steamboat service or even to provide a boat “until the line had been fairly

¹⁰⁰ LIRRC Minutes, Book 1, March 21, 1844. “The Transportation Company” was also known as the Boston & New York Transportation Company and as the New Jersey Steam Navigation Company.

¹⁰¹ LIRRC Minutes, Book 1, March 21, 1844.

tested and its facilities and advantages become known and appreciated.”¹⁰²

Negotiations continued with Vanderbilt and were initiated with the New Jersey Steam Navigation Company (NJSNC), the only two parties to consider partnering with the LIRRC, to purchase steamboats and complete the link to Boston. It is clear from the wording of the meeting minutes of August 1, 1844 that the LIRRC steamboat procuring committee was more interested in purchasing boats from the NJSNC than from Vanderbilt, “in the event of their being unable to purchase the boats of the said New Jersey Steam Navigation Co., [purchase] those of Cornelius Vanderbilt now in his line.”¹⁰³ On August 8, 1844 the LIRRC’s steamboat procurement committee composed of Board members Henry Ruggles, Elihu Townsend, and Samuel Brooks reported they had reached an agreement to purchase “...from Cornelius Vanderbilt the steam boats *Cleopatra*, *Worcester*, and *New Haven*.”¹⁰⁴ Vanderbilt agreed to the sale if he could then rent back the *Cleopatra* and *Worcester* for six months at a rate of \$8,333 per month. He received \$120,000 in LIRRC stock, 3,000 shares at 40 dollars per share, and \$112,500 in LIRRC bonds with interest paid to him every six months in exchange.¹⁰⁵

The LIRRC proposed offering steamboat service to Stonington and Norwich, the only two cities with existing railroad service in the mid-1840s that were also on the way to Boston (Figure 13).¹⁰⁶ The Norwich and Worcester Railroad (N&W) had its western terminus at Norwich near the head of the

¹⁰² *ARJ*, February 27, 1845, 129-144.

¹⁰³ LIRRC Minutes, Book 1, August 1, 1844.

¹⁰⁴ LIRRC Minutes, Book 1, August 1, 1844, August 8, 1844; *Laws of the State of New York* (1839), 260-261.

¹⁰⁵ LIRRC Minutes, Book 1, August 8, 1844; *ARJ*, February 27, 1845, 140.

¹⁰⁶ “Railroad Map of New England”

Thames River, which provided protected access to the rail line for ships. The downside of this location was that the Thames River frequently froze over during the winter rendering the piers inaccessible for several months at a time. In 1843, the tracks of the N&W were extended south to Allyn's Point where the river experienced less freezing and a new pier was also built there. Thus it was to Allyn's Point that the LIRRC steamboats arrived beginning in 1844.¹⁰⁷ The steamer *New Haven* carried passengers and freight between Stonington and Greenport and Allyn's Point and Greenport under an improvised, temporary agreement from August 1844 to March 1845, but more permanent agreements were necessary for the LIRRC to establish a regular service passengers and freight carriers could rely on.¹⁰⁸ As such, the LIRRC invited representatives from the Boston & Worcester (B&W) and N&W railroads to a meeting in March 1845 to discuss steamboat service. The terms that emerged from this meeting stated that each railroad company would receive 55 percent of the income from its respective steamboat service and the LIRRC would receive 45 percent; the first offer by the LIRRC was an even split, but this was rejected by both companies.¹⁰⁹

Once operations got underway for 1845, passengers boarded a train in Brooklyn, traveled on the LIRR, arrived in Greenport three hours later, sailed to Allyn's Point [Norwich] arriving there after two hours, took a train from

¹⁰⁷ Gregg M. Turner and Melancthon W. Jacobus, *Connecticut Railroads an Illustrated History: One Hundred and Fifty Years of Railroad History*, Edited by Oliver Jensen, (Hartford, CT: The Connecticut Historical Society, 1986), 43-44.

¹⁰⁸ LIRRC Minutes, Book 2, February 26, 1845, March 6, 1845; *The Boston Olive Branch*, August 17, 1844.

¹⁰⁹ LIRRC Minutes, Book 2, February 26, 1845, March 6, 1845.

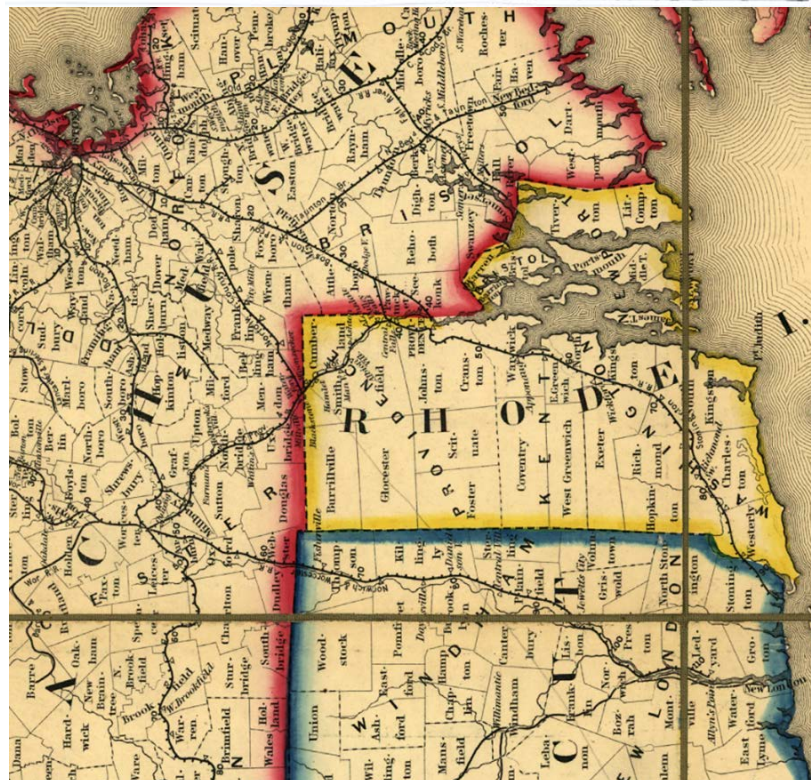
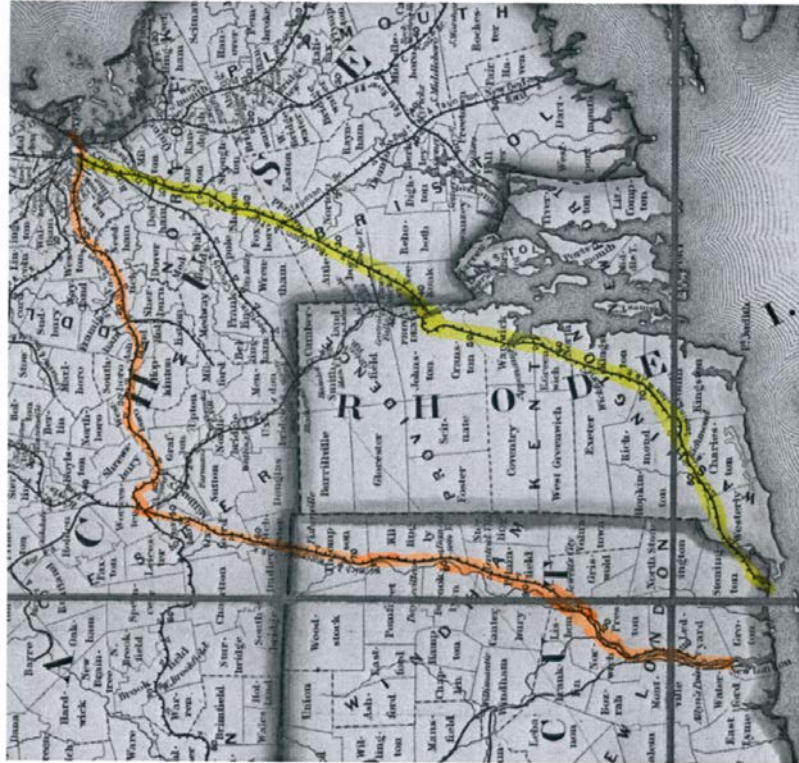
Allyn's Point to Worcester on the N&W for two hours, then a train from Worcester to Boston on the B&W for 90 minutes; arriving in Boston 9.5 hours after leaving Brooklyn.¹¹⁰ Alternatively, the route to Boston through Stonington involved a steamboat ride to that city from Greenport, a railroad journey on the Stonington Railroad (SR) to Providence, and a transfer to the Boston & Providence Railroad (B&P) to arrive in Boston. This route took only an hour and a half longer than the Allyn's Point route (Figures 14 & 15). Travel from New York to Boston was now completed, regularly, in less than 12 hours. Newspapers extolled the time-savings of the LIRR route over other steamboat-railroad-stagecoach routes in New England and everyone seemed excited about the prospects of the LIRR.¹¹¹

¹¹⁰ "Railroad Map of New England."

¹¹¹ *The Boston Olive Branch*, August 17, 1844; *Long Island Farmer*, August 13, 1844 & April 1, 1845.



Figure 13: Map of Eastern Long Island and Southern Connecticut & Rhode Island (1849) showing the termination of LIRR tracks at Greenport and the cities of Stonington and Allyn's Point [Norwich] where passengers connected from a LIRR Steamboat to either the Stonington or Norwich & Worcester Railroad.



Figures 14 (left) & 15 (right): Maps (1849) showing railroad routes of Southern New England (left) and highlighting the Stonington (orange) and Norwich & Worcester Railroads (yellow) (right).

Cornelius Vanderbilt

Cornelius Vanderbilt (Figure 16) had his own reasons for wanting to help the LIRRC that extended beyond professional courtesy or basic business savvy. At the same time he began negotiations with the LIRRC for the purchase of three of his steamboats, Vanderbilt was involved in a series of conflicts with other railroad and steamboat companies, and their owners, that hovered between professional competition and personal vendetta.¹¹² The most recent conflict began in May 1841 when Menemon Sanford, owner of the Norwich Steamboat Line and a rival of Vanderbilt, engineered a rate war that pitted a neutral third-party against Vanderbilt's company on the New York to Providence route. He, of course, retaliated with his own rate war a few months later. But it did not end there, Vanderbilt soon dedicated himself to owning, or at least obtaining a controlling interest in, every transportation company operating in and around New York, including Long Island Sound.¹¹³ A year and a half later Vanderbilt had forced Sanford to abandon his routes on Long Island Sound for the calmer business climate of the Boston to Maine routes after a series of further rate wars and lawsuits. Sanford also left his considerable stock interest in the Norwich Steamboat Line available for purchase; an opportunity Vanderbilt did not intend to waste. With one competitor out of the way, Vanderbilt's next major target was the Stonington Line which carried a large portion of the New York to Boston passengers and

¹¹² Edwin Dunbaugh, *Night Boat to New England 1815-1900*, (Westport, CT: Greenwood Press, 1992), 91-101.

¹¹³ T. J. Stiles, *The First Tycoon: The Epic Life of Cornelius Vanderbilt*, (New York: Alfred A. Knopf, 2009), 136-140.

freight across Long Island Sound on steamboats and across Connecticut and Massachusetts on trains.¹¹⁴ Advantageously, a competitor to the Stonington Line emerged in the form of the LIRRC and Vanderbilt did not intend to waste an opportunity there either.

Once he secured a place on the LIRRC's Board of Directors as a majority stockholder (Figure 17), a position graciously handed to him by LIRRC president George Fisk, Vanderbilt was in a better position to influence its decision making processes regarding steamboats and connecting railroads. Vanderbilt had served on the company's steamboat committee since joining the Board of Directors in November 1844. The committee was initially tasked to investigate the process and expense of commissioning a new boat so the LIRRC would no longer be reliant on purchasing or leasing from other companies, but a change to the by-laws of the LIRRC delegated even greater power to the steamboat committee.¹¹⁵ At their meeting on March 26, 1845, the LIRRC Board of Directors added a section to the company's by-laws stating the duties of each committee, accounts, freight, law, finance, and steamboat, and how committee members should be appointed. Under the duties of the steamboat committee is stated "a committee on steam boats whose duty it shall be to conduct their operations and generally to superintend their running and repairs."¹¹⁶ Those last few words gave Vanderbilt the opening he needed

¹¹⁴ Stiles, 142; Dunbaugh, 76.

¹¹⁵ LIRRC Minutes, Book 1, November 26, 1844; LIRRC Minutes, Book 2, November 22, 1845, January 12, 1846.

¹¹⁶ LIRRC Minutes, Book 1, March 26, 1844.

to commandeer the three-man committee and alter the course of the LIRRC's future steamboat service.

On April 4, 1845 an advertisement for the winter schedule of the LIRR in the *Brooklyn Daily Eagle and Kings County Democrat* listed trains as leaving Brooklyn at 7:30am, 9:30am, and 3:30pm and leaving Greenport at 9:00am and 1:00pm. It also stated that steamers crossed to Norwich on Monday, Wednesday, and Friday and to Stonington on Tuesday, Thursday, and Saturday with no Sunday train (Figure 13). A week later, on April 11, an advertisement with nearly the same exact wording appeared in the same newspaper with one important and sudden change: no more steamers to Stonington.¹¹⁷ Times for the trains had not changed, but their days of service had. The Monday, Wednesday, and Friday service from Brooklyn to Greenport by rail and then to Norwich by steamer remained unchanged, but the Tuesday, Tuesday, Thursday, and Saturday train from Brooklyn to Greenport provided no connection with a boat. A small notation in the lower, right-hand corner of the April 4 notice has the letters "ja8" meaning it was published for the first time on January 8, 1845. The April 11 article has a similar notation of "ap10" meaning it was first published on April 10.¹¹⁸ Combining these articles with the Board of Directors meeting minutes from April 8 saying "the company will run outside lines from New York to Providence and intermediate places via the Long Island Rail Road" and also giving the steamboat committee power to "make and carry out such arrangements for the running of these lines as they

¹¹⁷ *Brooklyn Daily Eagle and Kings County Democrat*, April 4, 1845, April 10, 1845, April 11, 1845.

¹¹⁸ *Brooklyn Daily Eagle and Kings County Democrat*, April 4, 1845, April 10, 1845, April 11, 1845.

may deem for the interest of this company” makes a convincing case for manipulation.

Aside from the coincidental timing of these events, a steamboat traveling from Greenport to Providence still needed to pass by Point Judith on its way. This is important because a major reason for building a railroad across Long Island in the first place was to avoid the hostile waters surrounding Point Judith by running a ferry to Allyn’s Point and Stonington. The waters around Point Judith were, and are, rocky and shallow and had sunk several dozen ships by the mid-nineteenth century. It is no mystery why the LIRRC wanted to avoid them and planned its routes accordingly. The same rationale applied to the idea of the LIRRC running a steamboat from Greenport to Fall River connecting with the Fall River Railroad (FRR) and then to Boston. Any boat traveling on that route still needed to cross Block Island Sound and navigate around Point Judith as well.¹¹⁹

Another example of Vanderbilt’s abuse of the powers delegated to the LIRRC steamboat committee was seen only a few months later in June 1845 when the *Brooklyn Daily Eagle and Kings County Democrat* printed an updated time and fare schedule for the LIRR. The through fare from Brooklyn to Boston, including the steamship connection, was \$2.00 while previously the cost had been \$5.00. At this same time, the fare from Brooklyn to Greenport was lowered from \$2.25 to \$1.75; a notation of “je10” in the lower right-hand

¹¹⁹ LIRRC Minutes, Book 2, April 8, 1845, September 5, 1845; “Railroad Map of New England”

corner indicated the schedule was first printed on June 10.¹²⁰ Significantly lower prices on one route by one company inevitably forced other companies to lower prices to the same amount on that route to avoid losing money, Vanderbilt's steamboat empire was built on this principle and he continued to expand it during his time with the LIRRC. Vanderbilt's vast personal fortune may have saved his companies from foundering during rate wars in the past, but he made no effort to help the LIRRC in this way, simply using the company as a means to an end; the end being the ruining and conquering of the Stonington Line, the strongest of his rivals. The Stonington Line lost money on extremely low fares, but so too did the LIRRC, an income disparity that caused extensive problems for the company even after Vanderbilt and his influence were gone.¹²¹

While still holding stock in the company, Vanderbilt ceased to be a member of the Board of Directors on February 23, 1846 when he was not re-elected. Vanderbilt attended 12 of the 16 Board of Directors meetings held during his first year as a stockholder, but almost none during his second; an indication that his interest in the LIRRC, and what the company could do for him, was waning.¹²² The end he hoped to achieve, eliminating the Stonington Line as a rival, was accomplished in March 1846 when Vanderbilt became a co-owner of that company and focused much of his business attention there. A year later, seemingly without any pretense, Vanderbilt sold his stock in the

¹²⁰ *Brooklyn Daily Eagle and Kings County Democrat*, June 10, 1845; *Brooklyn Daily Eagle*, June 20, 1845.

¹²¹ Stiles, 140-146.

¹²² LIRRC Minutes, Book 2, February 23, 1846; *Long Island Farmer*, February 28, 1846.

many companies he controlled, including the LIRRC, to pursue exploits on the other side of the country.¹²³

In January 1851, Vanderbilt contracted with the government of Nicaragua to provide a line of steamboats across the isthmus of Nicaragua connecting the Atlantic and Pacific Oceans for passengers traveling to California during the Gold Rush (Figure 18). He established Vanderbilt's Independent Line which embarked passengers at San Juan del Norte on the Atlantic side of Nicaragua, took them up the San Juan River and across Lake Nicaragua by boat, and then by train to San Juan del Sur on the Pacific side. From San Juan del Sur, Vanderbilt's Line carried passengers to Acapulco, Mexico and from there to San Francisco. He established this line in opposition to the existing Pacific Mail Steamship Company and Law's Line which ran across the isthmus of Panama. Nothing about his business practices changed in his endeavour to run the most efficient, most profitable, and best regarded steamboat line running to California. He succeeded in two of the three.¹²⁴

¹²³ Ernest Abram Wiltsee, *Gold Rush Steamers of the Pacific*, (San Francisco, The Grabhorn Press, 1938), 50-54; Dunbaugh, 99-101.

¹²⁴ Dunbaugh, 99-101; Wiltsee, 10, 26, & 53-54. "Law's Line" was owned by Vanderbilt's former business associate, George Law who, like Vanderbilt, had come to Central America to cater to Gold Rush passengers.

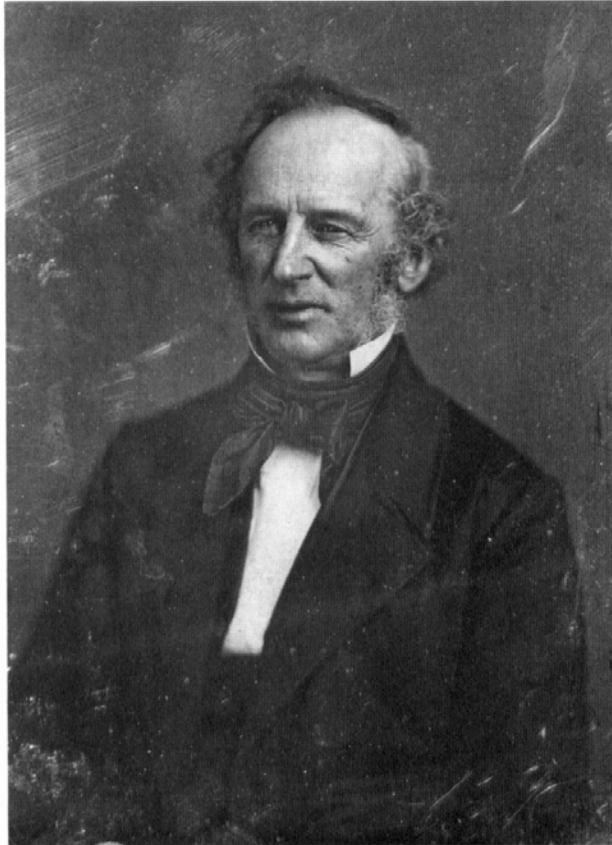


Figure 16: Daguerreotype of Cornelius Vanderbilt (1845)

Directors Long Island R.R. Co.		
1845		
1	Henry Puggles	✓
2	Edwin Post	✓
3	Charles Davis	✓
4	Samuel R. Brooks	✓
5	John Rankin	✓
6	Eliza Starnes	✓
7	Isaac Little	✓
8	Wm. Vanderbilt	✓
9	Saml. Sandor	✓
10	Alfred Brooks	✓
11	Edw. Derby	✓
12	Geo. B. Fisk	✓
13	Amos Clapp	✓

Figure 17: List of members of the LIRRC's Board of Directors in 1845. Vanderbilt is listed on Line 8, LIRRC President George Fisk is on Line 12.

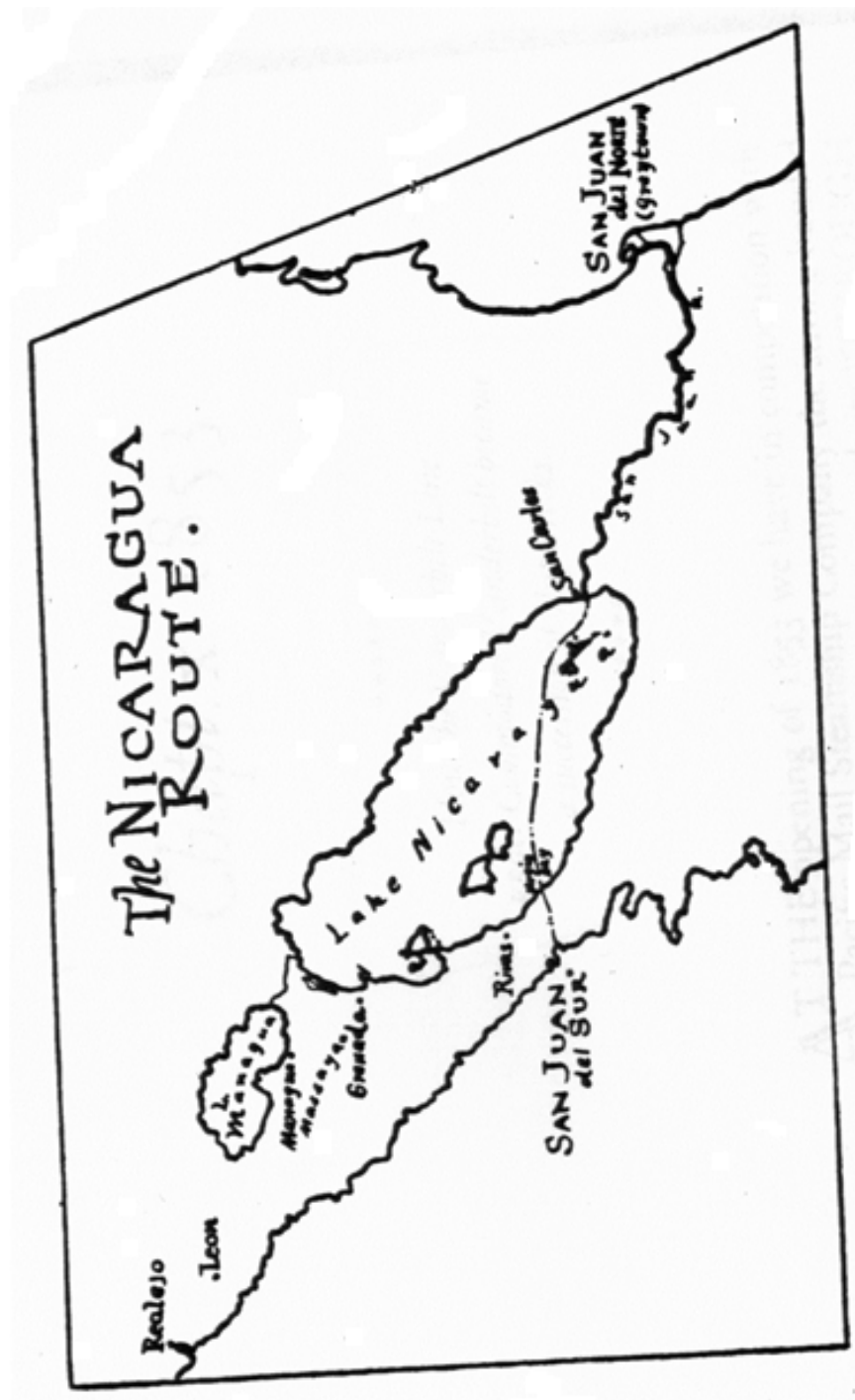


Figure 18: Map showing the route of Vanderbilt's Independent Line across Nicaragua.

Conclusion: Downfall

The first major threat to the core stability of the LIRRC came in August 1846 when the company was forced to sell two of its three steamboats to raise capital to pay debts, including lease fees on the B&J and interest on the loan from the State of New York. The steamers *Cleopatra* and *Worcester* were sold to the N&W, in which Cornelius Vanderbilt owned a controlling stock interest. The LIRRC approached the N&W with the sale of the two boats because of Vanderbilt's former connection with the boats and with the LIRRC. After a series of meetings between the two companies, the N&W agreed to purchase the boats for \$140,000 with \$40,000 in cash and \$100,000 in bonds with interest payable every six months.¹²⁵

After the sale of *Cleopatra* and *Worcester*, the LIRRC continued to offer railroad service from Brooklyn to Greenport and steamboat service to Allyn's Point (Figure 13) on the *New Haven* until June 9, 1847 when it was forced to sell the *New Haven* to cover debts incurred from the building of the Atlantic Avenue Tunnel in 1844. William Beard, a contractor on the project, brought a claim for unpaid debts against the LIRRC.¹²⁶ Without any boats of its own, and no one willing to lend one, service between Brooklyn and Boston came to an abrupt halt. Over the next few years, the LIRRC attempted to restart the service, but continually deteriorating financial conditions and alternative route options made those attempts difficult. So, working with what it had, the

¹²⁵ LIRRC Minutes, Book 2, February 23, 1846, March 10, 1846, August 5, 1846.

¹²⁶ LIRRC Minutes, Book 2, April 8, 1847, June 9, 1847.

company became what the people of Long Island always wanted, but what the LIRR was fundamentally unable to be: a local commuter railroad.

Unfortunately, ending steamboat service did not end the mountain of debt the LIRRC had accumulated over the preceeding decade. The company filed for bankruptcy and entered receivership on March 4, 1850 with former LIRRC secretary and treasurer Moses Maynard appointed as receiver by the Supreme Court of the State of New York. After a period of restructuring, the company exited receivership under the direction of Maynard as president in which role he served until 1852.¹²⁷

With all its debts paid and the debts owed to it collected, the LIRRC moved forward with the same name but a completely different spirit. Gone was the flame of ambition that characterized the company's founding and carried it through the difficult years that came afterward. Without the backdrop of the competition to shorten travel time between New York and Boston, the LIRRC was just another company fighting to survive in a sea of transportation options, and the men who ran it were just businessmen like any other of the time, not visionaries with grand plans of national acclaim.

¹²⁷ LIRRC Minutes, Book 2, March 11, 1850, February 4, 1850; *Long Island Farmer*, March 26, 1850.

BIBLIOGRAPHIC ESSAY

Much of what has been written about the Long Island Railroad Company (LIRRC) is in the context of stagecoach history, railroad history, steamboat history, New England history, and Long Island history. There are very few works specifically and entirely about the LIRRC and what does exist focuses little on the early years of the company, giving attention instead to the Gilded Age years of the late-nineteenth century and to the mid-twentieth century.

The most informative sources related to stagecoach history are advertisements and timetables that appeared in contemporary newspapers and guidebooks. These give an idea of travel times and distances as well as the network of stagecoach routes that crisscrossed New England. Specific titles include *Badger & Porter's Stage Register*, *American Railway Guide*, and *Disturnell's Guide*. Stephen Jenkins' work, *The Old Boston Post Road* is especially useful for specifics about mail carrying and passenger travel out of Boston during the early nineteenth century.

On railroad and steamboat history, the sources are more plentiful. Many sources on these topics discuss both railroads and steamboats as they so often worked together. Henry Varnum Poor's work, *History of the Railroads and Canals of the United States of America*, provides information on all railroad companies and canals operating during the mid-nineteenth century. The book, published in 1860, less than 50 years after the establishment of the first railroad companies in the United States, was a product of its time.

However, the short time span is a benefit because of the level of detail provided about several early, obscure railroad companies that operated for only a few years. *The Railroad Journey* by Wolfgang Schivelbusch complements Poor's factual history of railroad companies with a cultural perspective on them. Many of the chapters incorporate cultural information from Europe as well as America in discussions of changes in transportation culture from the stagecoach era to the railroad era.

Edwin Dunbaugh's trio of books on New England coastal steamboats provide detailed information on the companies, individuals, boats, routes, and cities that formed the coastal travel network during the nineteenth and twentieth centuries. He recounts this information in chronological order to assist the reader in grasping multiple events occurring at the same time and also in making cause and effect connections between events. The most relevant of Dunbaugh's books is the first in the series, *Night Boat to New England 1815-1900*. The second and third books in the series are *The Era of the Joy Line* and *The New England Steamship Company* which discuss later time periods.

There are also two general histories of Long Island that were helpful: *The Evolution of Long Island* by Ralph Henry Gabriel and *A History of Long Island From its First Settlement by Europeans to the Year 1845* by Nathaniel Prime. Both of these works are very dated by now (2016), published in 1921 and 1845 respectively, but information on the LIRR is included because of the large impact of the company on Long Island.

Specific histories about the LIRRC were difficult to find. The best ones are: *History of the Long Island Railroad Company 1834-1898* by E. B. Hinsdale, *Early History of the Long Island Railroad 1834-1900* by Mildred H. Smith, and *Steel Rails to the Sunrise* by George Foster and Ron Ziel. The first two are more relevant than the third because they provide much more information on the early years of the company. Hinsdale was an employee of the LIRRC during the 1870s in which position he gained firsthand knowledge of the history of the company; his book was published in 1898. Smith's book, published in 1965, is one of the more recent publications on the LIRRC. She draws on various scattered sources for information on the company and compiles them into an informative, cohesive work. Foster and Ziel's book falls into the trap of discussing mostly the late-nineteenth and mid-twentieth century golden ages of railroad popularity, though it does contain an introductory chapter that addresses the first 30 years of the LIRRC in the space of a few paragraphs.

Information on Cornelius Vanderbilt's involvement with the LIRRC, can be found in *The First Tycoon* by T. J. Stiles, a recent and well-researched biography of Vanderbilt that provides a broader picture of the man in business and with his family. Even though the section of text related to Vanderbilt and the LIRRC is small, the bibliography provides a wealth of sources to investigate. A second, older biography of Vanderbilt that provides considerable information on his business dealings is Wheaton J. Lane's *Commodore Vanderbilt*, published in 1942.

The best and most interesting primary sources of information for the railroad are the minutes of the LIRRC Board of Directors Meetings. These minutes give an inside perspective into the running of the company including details of: its establishment and incorporation, the elections of the Board members, sale of stock, purchase of engines and cars, financial burdens, and negotiations with other railroad and steamboat companies. These records allow the researcher to see events unfolding over time and know what issues were important to the Board.

As a general primary source, newspapers are wonderful. They provide a contemporary point of view on an issue and often include minute details that many secondary sources gloss over or exclude entirely. Newspapers can also provide great quotes since many newspaper writers did not hold their personal opinion back and often used colorful language to express it. Because of this fact, however, the content of articles must always be read in the context of the times in which it was written.

Many national newspapers have been digitized and are available online and accessible through public or academic libraries. Local newspapers can be more difficult to access. Many are not digitized or are only available on microfilm at a library local to the place of publication, which can be frustrating. NYS Historic Newspapers is a website that offers free access to many local newspapers from New York State with a wide range of dates. The Library of Congress also has a newspaper website called Chronicling America that provides free access, though its offerings are limited for some states.

The Library of Congress has also digitized a collection of transportation maps and within that collection a subset of railroad maps from the nineteenth century. The official date range is 1828-1900. These maps include land surveys, atlases and route maps of specific companies and lines. They cover the entire United States and offer details such as county and township boundaries, rivers and lakes, bridges, railroad stations, hills and mountains, land cover, stagecoach routes, and telegraph lines. This collection provides a contemporary perspective on the establishment and growth of the country's railroad network.

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Figure 3, Counties of Long Island (2016):
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Figure 4, Brooklyn & Jamaica Route Map:
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Figure 5, David Bates Douglass:
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Figure 9, Long Island Railroad Stock Certificate:
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Figure 10, Long Island Railroad Route Map:
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Figure 11, Long Island Topographic Map:
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Figure 12, Valentine Hicks Picture:
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Figure 13, Steamboat Route Map:

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Figure 14, Norwich & Worcester RR Map:

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Figure 16, Cornelius Vanderbilt:

Stiles, T. J. *The First Tycoon: The Epic Life of Cornelius Vanderbilt*. New York: Alfred A. Knopf, 2009.

Figure 17: List of members of the LIRRC's Board of Directors in 1845:

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Figure 18, Vanderbilt's Independent Line Route Map:

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